State of Montana
Department of Environmental Quality
Helena, Montana 59620

AIR QUALITY OPERATING PERMIT NUMBER OP2611-03

Renewal Application Received: **February 4, 2005**
Application Deemed Administratively Complete: **March 5, 2005**
Application Deemed Technically Complete: **April 1, 2005**
AFS Number: **030-111-0014A**

Draft Issue Date: **July 11, 2005**
Proposed Issue Date: **August 11, 2005**
End of EPA 45-day Review: **September 28, 2005**
Date of Decision: **September 29, 2005**
Effective Date: **October 31, 2005**
Expiration Date: **October 31, 2010**

In accordance with the Montana Code Annotated Sections 75-2-217 and 218, and the Administrative Rules of Montana (ARM) Title 17, Chapter 8, Subchapter 12, Operating Permit Program, ARM 17.8.1201, *et seq.*,

Montana Sulphur & Chemical Company
Billings-Lockwood Plant
627 Exxon Road
Section 24, Township 1 North, Range 26 East, Yellowstone County
Billings, MT 59107

hereinafter, referred to as "MSCC", is authorized to operate a stationary source of air contaminants consisting of the emission units described in this permit. Until this permit expires or is modified or revoked, MSCC is allowed to discharge air pollutants in accordance with the conditions of this permit. All conditions in this permit are federally and state enforceable unless otherwise specified. Requirements that are state only enforceable are identified as such in the permit. A copy of this permit must be kept on site at the above named facility.

Issued by the Department of Environmental Quality

_____ _____
Signature Date

Permit Issuance and Appeal Process: In accordance with ARM 17.8.1210(j), the Department of Environmental Quality's (Department) decision regarding issuance of an operating permit is not effective until 30 days have elapsed from the date of the decision issued September 29, 2005. The decision may be appealed to the Board of Environmental Review by filing a request for a hearing within 30 days after the date of decision. If no appealed is filed then the Department will send notification and a final permit cover page to be attached to this document stating that the permit is final. In addition, ARM 17.8.1233 allows for any person to petition the Environmental Protection Agency (EPA) within 60 days after the expiration of EPA's 45-day review period to object to issuance of this operating permit. If EPA objects to the operating permit as a result of a petition prior to the Department's notification of a final permit, MSCC and all affected parties will be informed of the stay of a final permit. If the Department has already notified MSCC and all affected parties, the Department shall issue a revised permit according to ARM 17.8.1231. Questions regarding the final issuance date and status of appeals should be directed to the Department at (406) 444-3490.

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Terms not otherwise defined in this permit or in the Definitions and Abbreviations Appendix of this permit have the meaning assigned to them in the referenced regulations or in the sulfur dioxide (SO_2) Stipulation.

SECTION I. GENERAL INFORMATION

The following general information is provided pursuant to ARM 17.8.1210(1).

Company Name: **Montana Sulphur & Chemical Company**

Mailing Address: **P.O. Box 31118**

City: **Billings** State: **Montana** Zip: **59107-1118**

Plant Name: **Billings - Lockwood Plant**

Plant Location: **627 Exxon Road, Billings, MT**

Plant Mailing Address: **P.O. Box 31118**

Responsible Official: **Larry Zink** Phone: **(406) 252-9324**

Facility Contact Person: **Larry Zink** Phone: **(406) 252-9324**

Primary SIC Code: **2819**

Nature of Business: **Gas Processing, Sulfur Recovery and Sulfur Products**

Description of Process:

The MSCC Complex serves two purposes. First, it acts as an air pollution control device for the Exxon refinery. MSCC receives sulfur-containing fuel gases from Exxon and desulfurizes these gases in its amine unit, and returns low-sulfur fuel gas back to the refinery. This action, along with the processing of directly, delivered acid gases from the refinery, serves to reduce sulfur oxide emissions that might otherwise be emitted to the atmosphere from the disposal of this material at the oil refinery site.

At MSCC, acid gases are processed in a multistage Claus Process and tail gas incinerator. In 1998, MSCC installed a SuperClaus Process pursuant to provisions in the 1996 and 1998 Stipulations with the Department regarding Emission Limiting Equipment (ELE). This SuperClaus process further desulfurizes Claus tailgases by selective partial oxidation and controls emissions of sulfur dioxide (SO_2) to assist in compliance with the emission limitations.

The second purpose of the facility is to convert the raw sulfur compounds from fuel gases, acid gases, and other materials to create useful, marketable products. With a variety of processes, MSCC creates a multitude of products including elemental sulfur; hydrogen gas; hydrogen, sodium, and carbon sulfides; sodium hydrosulfide (NaSH); dry fertilizers and in the future may produce ammonium bisulfites (ABS) and ammonium thiosulfate (ATS).

SECTION II. SUMMARY OF EMISSION UNITS

The emission units regulated by this permit are the following (ARM 17.8.1211):

Unit ID	Description	Pollution Control Device/Practice
EU1	Monaca Plant - Sulfur Vaporizer Heater	Firing Low Sulfur Fuel
EU2	Monaca Plant - Steam Methane Superheater	Firing Low Sulfur Fuel
EU3	100-Meter SRU Stack (Claus and other Units)	SuperClaus® and SO_2 CEMS
EU4	30-Meter Stack (Boilers and Process Units)	None
EU5	Railroad Boiler	None
EU6	Fuel Gas Boiler H-1	None
EU7	Fuel Gas Boiler H1-A	None
EU8	Fuel Gas Boiler H1-1	None
EU9	Fuel Gas Boiler H1-2	None
EU10	17-MMBtu/hr Boiler	None
EU11	Redundant Incinerator	Is a control device
EU11a	Existing Incinerator	Is a control device
EU12	80-ft West Flare (100 Meter SRU Stack)	None
EU13	125-ft East Flare (near Monaca Process)	None
EU14	100-Meter West Flare (located on 100 Meter SRU Stack)	None
EU15	Hydrogen Plant	None
EU16	Liquid H_2S and Compressor Unit	None
EU17	ATS Quench Water Evaporator-Treater-Cooling Towers (2)	None
EU18	Molten Sulfur Storage	None
EU18a	Molten Sulfur Storage in Railcars and Mobile Tanks	None
EU19	Molten Sulfur Loadout	None
EU20	Molten Sulfur Run-down Pits	None
EU21	Fertilizer Manufacture, Conveying and Loadout	Indoors, Tanks and Enclosures
EU22	Sulfur Product Manufacture, Conveying and Loadout	Indoors, Tanks and Enclosures
EU23	Various Valve, Pump and Flange Leaks	None
EU24	Boiler Treatment Lagoon with Aeration	None
EU25	Fugitive Emissions - Access Roads	None

SECTION III. PERMIT CONDITIONS

The following requirements and conditions are applicable to the facility or to specific emission units located at the facility (ARM 17.8.1211, 1212, and 1213).

A. Facility-Wide

Facility-Wide Permit Conditions				
Condition	**Rule Citation**	**Rule Description**	**Pollutant/Parameter**	**Limit**
A.1	ARM 17.8.105	Testing Requirements	Testing Requirements	-------
A.2	ARM 17.8.304(1)	Visible Air Contaminants	Opacity	40%
A.3	ARM 17.8.304(2)	Visible Air Contaminants	Opacity	20%
A.4	ARM 17.8.308(1)	Particulate Matter, Airborne	Fugitive Opacity	20%
A.5	ARM 17.8.308(2)	Particulate Matter, Airborne	Reasonable Precautions	-------
A.6	ARM 17.8.308	Particulate Matter, Airborne	Reasonable Precaution, Construction	20%
A.7	ARM 17.8.309	Particulate Matter, Fuel Burning Equipment	Particulate Matter	$E= 0.882 * H^{-0.1664}$ or $E= 1.026 * H^{-0.233}$
A.8	ARM 17.8.310	Particulate Matter, Industrial Processes	Particulate Matter	$E= 4.10 * P^{0.67}$ or $E= 55 * P^{0.11}- 40$
A.9	ARM 17.8.322(4)	Sulfur Oxide Emissions, Sulfur in Fuel	Sulfur in Fuel (liquid or solid fuels)	1 lb/MMBtu fired
A.10	ARM 17.8.322(5)	Sulfur Oxide Emissions, Sulfur in Fuel	Sulfur in Fuel (gaseous)	50 gr/100 CF
A.11	ARM 17.8.324(3)	Hydrocarbon Emissions, Petroleum Products	Gasoline Storage Tanks	-------
A.12	ARM 17.8.324	Hydrocarbon Emissions, Petroleum Products	65,000 Gallon Capacity	-------
A.13	ARM 17.8.324	Hydrocarbon Emissions, Petroleum Products	Oil-effluent Water Separator	-------
A.14	ARM 17.8.342	NESHAPs General Provisions	SSM Plans	Submittal
A.15	40 CFR 68	Chemical Accident Prevention	Risk Management Plan	--------
A.16	40 CFR 51	SIP	SO_2	--------
A.17	40 CFR 51	SIP	SO_2	--------
A.18	40 CFR 51	SIP	Sulfur Bearing Gases	--------
A.19	ARM 17.8.749	Reporting Requirements	Preconstruction Permit	--------
A.20	40 CFR 51	SIP	Reporting Requirements	
A.21	40 CFR 51	SIP	State Only Reporting Requirements	
A.22	ARM 17.8.1212	Reporting Requirements	Compliance Monitoring	--------
A.23	ARM 17.8.1207	Reporting Requirements	Annual Certification	--------

Conditions

A.1. Pursuant to ARM 17.8.105, any person or persons responsible for the emission of any air contaminant into the outdoor atmosphere shall, upon written request of the Department, provide the facilities and necessary equipment (including instruments and sensing devices) and shall conduct test, emission or ambient, for such periods of time as may be necessary using methods approved by the Department.

Compliance demonstration frequencies that list “as required by the Department” refer to ARM 17.8.105. In addition, for such sources, compliance with limits and conditions listing “as required by the Department” as the frequency, is verified annually using emission factors and engineering

calculations by the Department's compliance inspectors during the annual emission inventory review; in the case of Method 9 tests, compliance is monitored during the annual inspection by the compliance inspector.

A.2. Pursuant to ARM 17.8.304(1), MSCC shall not cause or authorize emissions to be discharged into the outdoor atmosphere from any source installed on or before November 23, 1968, that exhibit an opacity of 40% or greater averaged over six consecutive minutes, unless otherwise specified by rule or in this permit.

A.3. Pursuant to ARM 17.8.304(2), MSCC shall not cause or authorize emissions to be discharged into the outdoor atmosphere from any source installed after November 23, 1968, that exhibit an opacity of 20% or greater averaged over six consecutive minutes, unless otherwise specified by rule or in this permit.

A.4. Pursuant to ARM 17.8.308(1), MSCC shall not cause or authorize the production, handling, transportation, or storage of any material unless reasonable precautions to control emissions of particulate matter are taken. Such emissions of airborne particulate matter from any stationary source shall not exhibit an opacity of 20% or greater averaged over six consecutive minutes, unless otherwise specified by rule or in this permit.

A.5. Pursuant to ARM 17.8.308(2), MSCC shall not cause or authorize the use of any street, road or parking lot without taking reasonable precautions to control emissions of airborne particulate matter, unless otherwise specified by rule or in this permit.

A.6. Pursuant to ARM 17.8.308, MSCC shall not operate a construction site or demolition project unless reasonable precautions are taken to control emissions of airborne particulate matter. Such emissions of airborne particulate matter from any stationary source shall not exhibit an opacity of 20% or greater averaged over six consecutive minutes, unless otherwise specified by rule or in this permit.

A.7. Pursuant to ARM 17.8.309, unless otherwise specified by rule or in this permit, MSCC shall not cause or authorize particulate matter caused by the combustion of fuel to be discharged from any stack or chimney into the outdoor atmosphere in excess of the maximum allowable emissions of particulate matter for existing fuel burning equipment and new fuel burning equipment calculated using the following equations:

For existing fuel burning equipment (installed before November 23, 1968):
$E = 0.882 * H^{-0.1664}$

For new fuel burning equipment (installed on or after November 23, 1968):
$E = 1.026 * H^{-0.233}$

Where H is the heat input capacity in million Btu (MMBtu) per hour and E is the maximum allowable particulate emissions rate in pounds per MMBtu.

A.8. Pursuant to ARM 17.8.310, unless otherwise specified by rule or in this permit, MSCC shall not cause or authorize particulate matter to be discharged from any operation, process, or activity into the outdoor atmosphere in excess of the maximum hourly allowable emissions of particulate matter calculated using the following equations:

For process weight rates up to 30 tons per hour: $E = 4.10 * P^{0.67}$
For process weight rates in excess of 30 tons per hour: $E = 55.0 * P^{0.11} - 40$
Where E = rate of emissions in pounds per hour and p = process weight rate in tons per hour.

A.9. Pursuant to ARM 17.8.322(4), MSCC shall not burn liquid or solid fuels containing sulfur in

excess of 1 pound per million BTU fired, unless otherwise specified by rule or in this permit.

A.10. Pursuant to ARM 17.8.322(5), MSCC shall not burn any gaseous fuel containing sulfur compounds in excess of 50 grains per 100 cubic feet of gaseous fuel, calculated as hydrogen sulfide at standard conditions, unless otherwise specified by rule or in this permit.

A.11. Pursuant to ARM 17.8.324(3), MSCC shall not load or permit the loading of gasoline into any stationary tank with a capacity of 250 gallons or more from any tank truck or trailer, except through a permanent submerged fill pipe, unless such tank is equipped with a vapor loss control device or is a pressure tank as described in ARM 17.8.324(1), unless otherwise specified by rule or in this permit.

A.12. Pursuant to ARM 17.8.324, unless otherwise specified by rule or in this permit, MSCC shall not place, store or hold in any stationary tank, reservoir or other container of more than 65,000 gallon capacity any crude oil, gasoline or petroleum distillate having a vapor pressure of 2.5 pounds per square inch absolute or greater under actual storage conditions, unless such tank, reservoir or other container is a pressure tank maintaining working pressure sufficient at all times to prevent hydrocarbon vapor or gas loss to the atmosphere, or is designed and equipped with a vapor loss control device, properly installed, in good working order and in operation.

A.13. Pursuant to ARM 17.8.324, unless otherwise specified by rule or in this permit, MSCC shall not use any compartment of any single or multiple-compartment oil-effluent water separator, which compartment receives effluent water containing 200 gallons a day or more of any petroleum product from any equipment processing, refining, treating, storing or handling kerosene or other petroleum product of equal or greater volatility than kerosene, unless such compartment is equipped with a vapor loss control device, constructed so as to prevent emission of hydrocarbon vapors to the atmosphere, properly installed, in good working order and in operation.

A.14. Pursuant to ARM 17.8.342 and 40 CFR 63.6, MSCC shall submit to the Department a copy of any startup, shutdown, and malfunction (SSM) plan required under 40 CFR 63.6(e)(3) within 30 days of the effective date of this operating permit (if not previously submitted), within 30 days of the compliance date of any new National Emission Standard for Hazardous Air Pollutants (NESHAPs) or Maximum Achievable Control Technology (MACT) standard, and within 30 days of the revision of any such SSM plan, when applicable. The Department requests submittal of such plans in electronic form, when possible.

A.15. A Risk Management Plan developed in accordance with 40 CFR 68 shall be registered with the United States Environmental Protection Agency by June 21, 1999. MSCC shall submit a certification statement to the Department that states MSCC is in compliance with the requirements of 40 CFR 68, including registration (40 CFR 68.160).

A.16. Pursuant to the June 12, 1998, Board Order adopting a sulfur dioxide control plan, MSCC shall comply with all requirements of Exhibit A and Attachment 1 of the plan, (Board Order signed on June 12, 1998. This requirement is “State Only” until approval of the State Implementation Plan (SIP) by EPA.).

A.17. Pursuant to the June 12, 1998, Board Order adopting a sulfur dioxide control plan, MSCC shall comply with all requirements of Exhibit A-1 and corresponding attachments (Board Order signed on June 12, 1998. This requirement is “State Only.”).

A.18. MSCC shall utilize appropriate maintenance, repair, and operating practices to control emissions of sulfur bearing gases from minor sources such as ducts, stacks, valves, vents, vessels, and

flanges, which are not otherwise subject to June 12, 1998, Order from the Board adopting a SO_2 control plan (Board Order signed on June 12, 1998. This requirement is "State Only" until approval of the SIP by EPA.).

Reporting

A.19. MSCC shall provide the Department with written notification of the following dates within the specified times (ARM 17.8.749):

a. Notification of date of continuance of construction of the ATS process equipment and ammonia reduction system within 15 days of continuance or 15 days of permit issuance, whichever is later.

b. Notification of cessation of construction and subsequent restart of construction of the ATS process equipment and ammonia reduction system within 15 days of such actions.

c. Notification of actual start-up date of the ATS process equipment and ammonia reduction system within 15 days of start up.

d. Notification of commencement of construction of the redundant incinerator at least 15 days prior to commencement of construction.

e. Notification of actual start-up date of the redundant incinerator within 15 days after start up.

A.20. Pursuant to the June 12, 1998, Board Order adopting a sulfur dioxide control plan, MSCC shall comply with all reporting requirements of Exhibit A and Attachment 1 of the plan (Board Order signed on June 12, 1998. This requirement is "State Only" until approval of the SIP by EPA.).

A.21. Pursuant to the June 12, 1998, Board Order adopting a sulfur dioxide control plan, MSCC shall comply with all reporting requirements of Exhibit A-1 and corresponding attachments (Board Order signed on June 12, 1998. This requirement is "State Only.").

A.22. On or before February 15 and August 15 of each year, MSCC shall submit to the Department the compliance monitoring reports required by Section V.D. These reports must contain all information required by Section V.D, as well as the information required by each individual emissions unit. For the reports due by February 15 of each year, MSCC may submit a single report, provided that it contains all the information required by Section V.B & V.D. Per ARM 17.8.1207,

> *any application form, report, or compliance certification submitted pursuant to ARM Title 17, Chapter 8, Subchapter 12 (including semiannual monitoring reports), shall contain certification by a responsible official of truth, accuracy and completeness. This certification and any other certification required under ARM Title 17, Chapter 8, Subchapter 12, shall state that,* ***"based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate and complete."***

A.23. By February 15 of each year, MSCC shall submit to the Department the compliance certification required by Section V.B. The annual certification report required by Section V.B must include a statement of compliance based on the information available that identifies any observed,

documented or otherwise known instance of noncompliance for each applicable requirement. Per ARM 17.8.1207,

> *any application form, report, or compliance certification submitted pursuant to ARM Title 17, Chapter 8, Subchapter 12 (including annual certifications), shall contain certification by a responsible official of truth, accuracy and completeness. This certification and any other certification required under ARM Title 17, Chapter 8, Subchapter 12, shall state that,* ***"based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate and complete."***

B. Monaca Plant; EU1 Sulfur Vaporizer Heater and EU2 Steam Methane Superheater

Permit Condition(s)	Pollutant/ Parameter	Permit Limit	Compliance Demonstration Method	Compliance Demonstration Frequency	Reporting Requirement
B.1, B.3, B.8, B.12, B.16, B.17	Opacity	20%	Burning natural gas or low sulfur refinery fuel gas	Ongoing	Semiannual
B.2, B.3, B.8, B.12, B.16, B.17	Particulate Matter	0.60 lb/MMBtu			
B.3, B.4, B.5, B.9, B.10, B.12, B.13, B.14, B.15, B.16, B.17	H_2S	30 ppm by volume H_2S on an annual basis	Burning only natural gas or performing Draeger Tube testing and recording the SCFD of refinery fuel gas	Ongoing - Daily	Quarterly
			Method 11	As required by the Department and Section III.A.1	Semiannual
B.6, B.11, B.13, B.14, B.16, B.17	NO_X – Sulfur Vaporizer	0.48 lb/hr	Method 7/7E	As required by the Department and Section III.A.1	Semiannual
B.7, B.11, B.13, B.14, B.16, B.17	NO_X – Steam Methane	0.27 lb/hr	Method 7/7E	As required by the Department and Section III.A.1	Semiannual

Conditions

B.1. MSCC shall not cause or authorize emissions to be discharged into the outdoor atmosphere from any source that exhibit an opacity of 20% or greater averaged over six consecutive minutes (ARM 17.8.304(2)).

B.2. MSCC shall not cause or authorize particulate matter caused by the combustion of fuel to be discharged from any stack or chimney into the outdoor atmosphere in excess of 0.60 lb/MMBtu (ARM 17.8.309(1)).

B.3. MSCC shall be allowed to burn a combination of natural gas and refinery fuel gas in the Sulfur Vaporizer Heater and the Steam Methane Superheater (ARM 17.8.752).

B.4. MSCC shall not burn fuel gas that contains in excess of 30 parts per million (ppm) by volume hydrogen sulfide (H_2S) averaged on an annual basis (ARM 17.8.752).

B.5. MSCC shall monitor and record the standard cubic feet per day (SCFD) of fuel gas consumed by the Sulfur Vaporizer Heater and the Steam Methane Superheater (ARM 17.8.749).

B.6. NO_X emissions from the Sulfur Vaporizer Heater shall not exceed 0.48 lb/hr (ARM 17.8.752).

B.7. NO_X emissions from the Steam Methane Heater shall not exceed 0.27 lb/hr (ARM 17.8.752).

Compliance Demonstration

B.8. The compliance monitoring method required by this permit for opacity Section III.B.1 and the particulate limit Section III.B.2 may be satisfied by burning only natural gas or low sulfur refinery fuel (ARM 17.8.1213).

B.9. Burning only pipeline quality natural gas or its equivalent may satisfy the compliance monitoring method required by this permit for Section III.B.4. For cases where refinery fuel gas is fired, MSCC shall record the daily SCFD of refinery gas consumed by each heater and perform Draeger Tube Testing and recordkeeping as specified by Appendix E (ARM 17.8.1213).

B.10. As required by the Department and Section III.A.1, MSCC shall perform a Method 11 source test on the Monaca plant heaters to monitor compliance with the emission limitation in Section III.B.4. The test methods shall conform to 40 CFR Part 60, Appendix A and the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106 and ARM 17.8.1213).

B.11. As required by the Department and Section III.A.1, MSCC shall perform a Method 7/7E source test on the Monaca plant heaters to monitor compliance with the emission limitations in Section III.B.6 and III.B.7. The test methods shall conform to 40 CFR Part 60, Appendix A and the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106 and ARM 17.8.1213).

Recordkeeping

B.12. MSCC shall maintain on site a record that includes entries of the following: the date; the time; the person's initials; the operating status of each heater; the type of fuel(s) fired; the SCFD of each fuel consumed by each heater, and the Draeger Tube results. Entries shall be made whenever the fuel types or operating status of the heaters change. MSCC must print the record monthly and retain a copy of the records on-site (ARM 17.8.1212).

B.13. All compliance source test recordkeeping shall be performed in accordance with the test method used and the Montana Source Test Protocol and Procedures Manual, and shall be maintained on site (or under facility's control) (ARM 17.8.106 and ARM 17.8.1212).

Reporting

B.14. Any compliance source test reports must be submitted in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106 and ARM 17.8.1212).

B.15. MSCC shall provide quarterly reports that identify the type and quantity (SCFD) of natural gas and refinery fuel gas fired in each of the Monaca Heaters. The quarterly reports shall be submitted on a calendar-year basis within 30 days of the end of each calendar quarter. The quarterly reports shall be submitted to the Department's Permitting and Compliance Division office in Helena and the Billings Regional Office. The quarterly report format shall consist of both a comprehensive electronic-magnetic report and a written or hard copy data summary report (ARM 17.8.1212).

B.16. The annual compliance certification required by Section V.B must contain a certification statement for the above applicable requirements (ARM 17.8.1212).

B.17. The semiannual monitoring report shall provide (ARM 17.8.1212):

a. Verification that the fuel burned was not in excess of 30 ppm H_2S by submitting the Draeger Tube test results;

b. Certification that the quarterly reports were submitted as specified by Section III.B.14; and

c. A summary of the results of any required reference method tests performed during the reporting period.

C. EU3 100-Meter Main ATS-SRU Stack (Claus and other units)

Condition(s)	Pollutant/ Parameter	Permit Limit	Compliance Demonstration Method	Compliance Demonstration Frequency	Reporting Requirement
C.1, C.10, C11, C.18, C.22, C.23	Opacity	40% - Claus Operations, 17-MMBtu/hr Boiler, and Redundant Incinerator	Method 9 and Notification	Semiannual	Semiannual
C.2, C.10, C.18, C.22, C.23	Opacity	20%	Method 9	Semiannual	Semiannual
C.3, C.12, C.18, C.21, C.22, C.23	Particulate Matter, Industrial Processes	$E=55*P^{0.11}$ - 40	Method 5	As required by the Department and Section III.A.1	Annual
C.4, C.12, C.18, C.21, C.22, C.23	Particulate Matter, Fuel Burning	$E=0.882*H^{-0.1664}$ and/or $E=1.026*H^{-0.233}$	Method 5	As required by the Department and Section III.A.1	Annual
C.5, C.6, C.7, C.8, C.13, C.14, C.15, C.16, C.19, C.20, C.21, C.22, C.23	SO_2	Buoyancy Flux Calculations 3,577.4 lb/3-hr 28,618.9 lb/day 9,088,000 lb/yr 3,817 tons per rolling-12 months	CEMS Backup temperature and flowrate Monitoring System Method 6/6C	Ongoing As required by the 1998 STIP Annual	Quarterly Quarterly Annual
C.9, C17, C.18, C.22, C.23	Ammonia	19.80 ton/yr and 108.50 lb/day	Standard Method 417B	As required by the Department and Section III.A.1	Annual

Conditions

C.1. MSCC shall not cause or authorize emissions to be discharged into the outdoor atmosphere from the existing Claus operation, the 17-MMBtu/hr boiler, and the redundant incinerator when venting to the 100-Meter stack that exhibit an opacity of 40% or greater averaged over six consecutive minutes (ARM 17.8.304(1)).

C.2. MSCC shall not cause or authorize emissions to be discharged into the outdoor atmosphere from the ATS operations that exhibit an opacity of 20% or greater averaged over six consecutive minutes (ARM 17.8.304(2)).

C.3. The particulate emissions from process weight shall not exceed the value calculated by $E = 55.0 * P^{0.11} - 40$, where E is the rate of emissions in pounds per hour and P is the process weight rate in tons per hour (ARM 17.8.310). As applied to Claus sulfur plants it is agreed that "process

weight" shall be interpreted to mean the weight of the following where applicable:

a. Sour material streams processed through amine units, strippers or other separating equipment where the acid gas waste streams from such equipment are discharged to a Claus Sulfur Unit for treatment;

b. Waste acid, acid sludge or other sulfurous materials fed into a Claus Sulfur Unit for treatment or destruction and not accounted for in (a) above; and

c. Any chemicals and reagents added and consumed in the Claus reactions and specifically including process air utilized in the Claus reaction for the conversion of the acid gases, waste acid, acid sludges or other sulfurous materials into less noxious materials.

(April, 1978 Billings/Laurel Plan which included the Board of Health and Environmental Sciences Order and Board Order signed on January 25, 1978).

C.4. The particulate emissions from fuel burning shall not exceed the value calculated by $E=0.882*H^{-0.1664}$ for existing equipment installed prior to November 23, 1960, and/or $E=1.026*H^{-0.233}$ for new fuel burning equipment where H is the heat input capacity in MMBtu per hour and E is the maximum allowable particulate emissions rate in lbs. per MMBtu (ARM 17.8.309).

C.5. The following SO_2 emission limitations shall apply to the 100-Meter Stack except when SO_2 emissions from the Railroad Boiler, the H-1 Unit, the H1-A Unit, the H1-1 Unit or the H1-2 Unit are exhausting through the 30-Meter Stack:

a. Three Hour Emission Limitation (E_L) for SO_2 from the 100-Meter Stack is dependent upon, and varies in accordance with, the 3-Hour Average Buoyancy Flux (F_3) of the exhaust gas that is emitted from the 100Meter Stack.

b. Three Hour Emissions of SO_2 in pounds of SO_2 per 3-hours from the 100-Meter Stack shall not exceed the value of the 3-Hour Emission Limitation, E_L, as determined by the following equations:

For $F_3 < 20.58$ m^4/s^3
$E_L = 0.2665*(F_3)^3 - 8.6096*(F_3)^2 + 138.100*F_3 + 2694.86$

For $20.58 \leq F_3 \leq 129.8$ m^4/s^3
$E_L = 0.0019*(F_3)^3 - 0.5168*(F_3)^2 + 86.327*F_3 + 2639.10$

For $F_3 > 129.8$ m^4/s^3
$E_L = 9291.86$

Where:
F_3 = 3-Hour Average Buoyancy Flux in m^4/sec^3; and
E_L = 3-Hour Emission Limitation for SO_2 in pounds of SO_2 per 3-hours.

c. Daily Emissions of SO_2 from the 100-Meter Stack shall not exceed the sum of all of the 3-Hour Emission Limitations, ΣE_L, for the eight non-overlapping 3-hour periods in a calendar day.

d. Annual Emissions of SO_2 from the 100-Meter Stack shall not exceed 9,088,000 pounds per calendar year

(Board Order Signed on June 12, 1998. This requirement is "State Only" until approval of the

SIP by the United States Environmental Protection Agency (EPA)).

C.6. The following SO_2 emission limitations shall apply to the 100-Meter Stack whenever SO_2 emissions from either the Railroad Boiler, the H-1 Unit, the H1-A Unit, the H1-1 Unit, or the H1-2 Unit are exhausting through the 30-Meter Stack:

a. 3-hour emissions of SO_2 from the 100-Meter Stack shall not exceed 3,577.4 pounds per 3-hour period.

b. Daily emissions of SO_2 from the 100-Meter Stack shall not exceed 28,618.9 pounds per calendar day.

c. Annual emissions of SO_2 from the 100-Meter Stack shall not exceed 9,088,000 pounds per calendar year.

(Board Order Signed on June 12, 1998. This requirement is "State Only" until approval of the SIP by EPA).

C.7. If, for any 3-hour period during the course of a Calendar Day, the conditions for Section III.C.5 and III.C.6 both apply, then the resulting 3-hour emission limitation for the 100-Meter Stack shall be determined by prorating, on an hourly basis, the emission limits contained in Section III.C.5 and III.C.6 (Board Order Signed on June 12, 1998. This requirement is "State Only" until approval of the SIP by EPA).

C.8. On and after the date the MSCC first introduces supplemental sulfur or supplemental hydrogen sulfide gas feed into the Redundant Incinerator as feed for the ATS unit, the SO_2 emissions from the 100-Meter Stack are limited to 3,817 tons per rolling 12 months (ARM 17.8.749).

C.9. Ammonia emissions from the ATS process are limited to 19.80 ton/yr and 108.50 lb/day (ARM 17.8.749).

Compliance Demonstration

C.10. Every six months a Method 9 test must be performed in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106), except that prior notification of the test is not required. The Method 9 test must be used to monitor compliance with the opacity limit. Each observation period shall be a minimum of six minutes unless any one reading is greater than 40% with Claus Operations or 20% with the ATS equipment, then the observation period shall be a minimum of 20 minutes or until a violation of the standard has been documented, whichever is a shorter period of time (ARM 17.8.1213).

C.11. Whenever the 17-MMBtu/hr Boiler and/or the Redundant Incinerator emissions will be vented to the 100-Meter stack and fired on any fuel other than pipeline quality natural gas or refinery fuel gas, then MSCC must notify the Department in writing at least three-working days, or on another schedule as approved by the Department, prior to venting the emissions to the 100-Meter Stack. This notification shall specify the date, time, material to be combusted, and affected emission unit(s) (ARM 17.8.1213).

C.12. As required by the Department and Section III.A.1, MSCC shall perform a Method 5 or other approved test to monitor compliance with the limitations contained in Section III.C.3 and III.C.4. The source test shall conform to the requirements of the Montana Source Test Protocol and Procedures Manual (ARM 17.8.105, ARM 17.8.106, and ARM 17.8.1213).

C.13. In accordance with the Stipulation (STIP), MSCC shall operate and maintain a continuous emissions monitor system (CEMS) to measure the SO_2 concentration from the SRU 100-Meter Stack. All CEMS shall be operated pursuant to any and all requirements of Exhibit A of the STIP (Appendix F). Monitoring compliance with the emission limitations contained in Section III.C.5 through III.C.8 shall be achieved by using data from the CEMS, with the appropriate equations, and by performing annual source testing using EPA approved methods (40 CFR Part 60, Appendix A, Methods 1-4 and 6/6C as appropriate for the STIP (Appendix F) and Exhibit A) or an equivalent method as approved by the Department and EPA, and in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106). The annual Relative Accuracy Test Audit (RATA) required by Sections 6(C) and (D) of the STIP (Appendix F) may substitute for the annual source test provided that the flow rate RATA and the concentration RATA are performed simultaneously and additional calculations are made to determine and report the data in pounds per hour sulfur dioxide (Board Order signed on June 12, 1998. This requirement is "State Only" until approval of the SIP by EPA.) (ARM 17.8.1213).

C.14. In accordance with Exhibit A, Section 6(B)(2) of the STIP (Appendix F), MSCC shall install, operate, and maintain a continuous stack flow rate monitor and temperature monitor (at a minimum, a thermocouple) to measure the stack gas flow rates from the 100-Meter Stack (Board Order signed on June 12, 1998. This requirement becomes federally enforceable upon approval of the SIP by EPA.) (ARM 17.8.1213).

C.15. In accordance with Exhibit A, Section 6(B)(3) of the STIP (Appendix F), 6 months after EPA approval of the Buoyancy Flux monitoring requirements, MSCC shall install and maintain a backup temperature and flow rate monitoring system to measure and record the stack gas temperature and flow rate from the 100-Meter Stack. The back-up temperature and flow rate monitoring system shall be capable of obtaining and recording stack parameters to determine "V" and/or "T_S" in the event of the failure of the primary temperature and flow rate monitoring system which is a component of the CEMS required by Section 6(B)(2) of the STIP and shall meet the performance specifications contained in Section 2(A)(3) of the STIP (Appendix F). However, the back-up system may rely upon the in-stack pitot tube and associated mechanical connections that are components of the primary temperature and flow rate monitoring system up to, but not including, the transducer.

For purposes of compliance with this requirement, the backup monitoring equipment must include as a minimum a differential pressure transducer, a thermocouple, and either:

a. Chart recorder(s) capable of recording "T_S" and pitot tube differential pressure.

b. A data logger capable or recording "T_S" and the calculated "V", the calculated flowrate, or the pitot tube differential pressure to calculate "V" and flowrate.

Upon installation, MSCC shall operate the backup temperature and flow rate monitoring system whenever the primary (CEMS) temperature and flow rate monitoring system is determined to have failed (Board Order signed on June 12, 1998. This requirement is "State Only" until approval of the SIP by EPA.) (ARM 17.8.1213).

C.16. Once the ATS process becomes operational, MSCC shall begin calculating a 12-month total for SO_2 emissions. MSCC shall document, by month, the SO_2 emissions from the SRU 100-Meter Stack. By the 25th day of each month, MSCC shall total the SO_2 emissions from the SRU 100-Meter Stack for the previous month. The monthly information will be used to verify compliance with the rolling 12-month limitation in Section III.C.7. The information for each of the previous months shall be submitted along with the annual emission inventory (ARM 17.8.749 and ARM 17.8.1213).

C.17. As required by the Department and Section III.A.1, MSCC shall perform Standard Method 417B or other test methods as approved by the Department to demonstrate compliance Section III.C.9 (ARM 17.8.1213).

Recordkeeping

C.18. All compliance source test recordkeeping shall be performed in accordance with the test method used and the Montana Source Test Protocol and Procedures Manual, and shall be maintained on site (or under facility's control) (ARM 17.8.106 and ARM 17.8.1212).

C.19. MSCC shall maintain on site all CEMS data, including the continuous stack flow rate monitor data in accordance with the STIP (ARM 17.8.1212).

Reporting

C.20. In accordance with Section 7 of the STIP, MSCC shall submit quarterly reports on a calendar-year basis. The quarterly reports shall be submitted within 30 days of the end of each calendar quarter. The quarterly reports shall be submitted to the Department's Permitting and Compliance Division office in Helena and the Billings Regional Office. The quarterly report format shall consist of both a comprehensive electronic-magnetic report and a written or hard copy data summary report (ARM 17.8.1212).

C.21. Any compliance source test reports must be submitted in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106 and ARM 17.8.1212).

C.22. The annual compliance certification required by Section V.B must contain a certification statement for the above applicable requirements (ARM 17.8.1212).

C.23. The semiannual monitoring report shall provide (ARM 17.8.1212):

a. Certification that the CEMS data and the appropriate equations were used in determining compliance with Section III.C.5 through III.C.8;

b. Certification that the continuous stack flow rate monitor was operated and maintained and the data was used to determine stack gas flow rates in the quarterly reports;

c. Certification that quarterly reports were submitted to the Department as required by Section 7 of the STIP;

d. Certification that notifications were made to the Department as required by Section III.C.11; and

e. A summary of the results of any required reference method tests performed during the reporting period.

D. EU4 30-Meter SRU Stack (Boilers and Process Units)

Condition(s)	Pollutant/ Parameter	Permit Limit	Compliance Demonstration		Reporting Requirement
			Method	Frequency	

Condition(s)	Pollutant/ Parameter	Permit Limit	Compliance Demonstration		Reporting Requirement
			Method	Frequency	
D.1, D.8, D.12, D.16, D.17	Opacity	40%	Method 9	Semiannual	Semiannual
D.2, D.8, D.12, D.16, D.17	Opacity	20%	Method 9	Semiannual	Semiannual
D.3, D.4, D.10, D.11, D.13, D.14, D.15, D.16, D.17	SO_2	12 lb/3hr 96 lb/day 35,040 lb/yr	Burning only natural gas or performing Draeger Tube testing and recording the SCFD of refinery gas consumed at each boiler	Ongoing	Quarterly
			Method 6/6C	As required by the Department and Section III.A.1	Semiannual
D.5, D.6, D.13, D.14, D.16, D.17	Temperature Monitor (at a minimum, a thermocouple	250 ^oF	Recordkeeping	Hour	Quarterly
D.7, D.9, D.15, D.16, D.17	Particulate Matter, Fuel Burning	$E=0.882*H^{-0.1664}$ and/or $E=1.026*H^{-0.233}$	Method 5	As required by the Department and Section III.A.1	Semiannual

Conditions

D.1. MSCC shall not cause or authorize emissions to be discharged into the outdoor atmosphere from the Railroad Boiler, the H-1 Unit, the H1-A Unit, the H1-1 Unit, H1-2 Unit, and the H1-2 Unit that exhibit an opacity of 40% or greater averaged over six consecutive minutes (ARM 17.8.304(1)).

D.2. MSCC shall not cause or authorize emissions to be discharged into the outdoor atmosphere from the 17-MMBtu/hr Boiler or Redundant Incinerator that exhibit an opacity of 20% or greater averaged over six consecutive minutes (ARM 17.8.304(2)).

D.3. Emissions from the 30-Meter Stack shall not exceed the following (Board Order signed on June 12, 1998. This requirement is "State Only" until approval of the SIP by EPA.):

a. Three-Hour Emissions of SO_2 from the 30-Meter Stack shall not exceed 12.0 pounds per 3-hour period.

b. Daily Emissions of SO_2 from the 30-Meter Stack shall not exceed 96.0 pounds per calendar cay.

c. Annual Emissions of SO_2 from the 30-Meter Stack shall not exceed 35,040 pounds per calendar year.

D.4. MSCC shall burn only low sulfur fuel gas or natural gas in any unit being exhausted through the

30-Meter Stack. Except as provided in Section (3)(A)(2)(e) of the STIP, the following units are the only SO_2 emitting units that are allowed to be exhausted through the 30-Meter Stack:

a. The Railroad Boiler,
b. The H-1 Unit,
c. The H1-A Unit,
d. The H1-1 Unit,
e. The H1-2 Unit, and
f. The 17-MMBtu/hr Boiler (when burning natural gas)

(Board Order signed on June 12, 1998. This requirement is "State Only" until approval of the SIP by EPA.).

D.5. MSCC shall operate, and maintain a temperature monitor (at a minimum, a thermocouple) to measure the stack gas temperature of the 30-Meter Stack (Board Order signed on June 12, 1998. This requirement is "State Only" until approval of the SIP by EPA.).

D.6. MSCC shall monitor and record the average hourly stack temperature in the 30-Meter Stack. MSCC shall report quarterly, any dates in which the stack temperature exceed 250 degrees Fahrenheit (°F) (ARM 17.8.749).

D.7. The particulate emissions from fuel burning shall not exceed the value calculated by $E=0.882*H^{-0.1664}$ for existing equipment installed prior to November 23, 1960, and/or $E=1.026*H^{-0.233}$ for new fuel burning equipment where H is the heat input capacity in MMBtu per hour and E is the maximum allowable particulate emissions rate in lbs. per MMBtu (ARM 17.8.309).

Compliance Demonstration

D.8. Every six months a Method 9 test shall be performed in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106), except that prior notification of the test is not required. The Method 9 test must be used to monitor compliance with the opacity limit. Each observation period shall be a minimum of six minutes unless any one reading is greater than 20%, then the observation period shall be a minimum of 20 minutes or until a violation of the standard has been documented, whichever is a shorter period of time (ARM 17.8.1213).

D.9. As required by the Department, MSCC shall perform a Method 5 or other approved test to monitor compliance with the limitation contained in Section III.D.7. The source test shall conform to the requirements of the Montana Source Test Protocol and Procedures Manual (ARM 17.8.105, ARM 17.8.106, and ARM 17.8.1213).

D.10. Burning only pipeline quality natural gas or its equivalent may satisfy the compliance monitoring method required by this permit for Section III.D.3. For cases where refinery fuel gas is fired, MSCC shall record the daily SCFD of refinery gas consumed by each boiler vented to the 30-Meter Stack and perform Draeger Tube Testing and recordkeeping as specified by Appendix E (ARM 17.8.1213).

D.11. As required by the Department and Section III.A.1, MSCC shall perform a Method 6/6C source test on the 30-Meter Stack to monitor compliance with the emission limitations in Section III.D.3. The test methods shall conform to 40 CFR Part 60, Appendix A and the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106 and ARM 17.8.1213).

Recordkeeping

D.12. All compliance source test recordkeeping shall be performed in accordance with the test method used and the Montana Source Test Protocol and Procedures Manual, and shall be maintained on site (or under facility's control) (ARM 17.8.106 and ARM 17.8.1212).

D.13. MSCC shall record the hourly temperature of the 30-Meter Stack in accordance with the STIP. In addition, MSCC shall maintain a record that includes the following entries, the date, the time, the units exhausting to the 30-Meter Stack, the type of fuel(s) fired, the SCFD of each fuel consumed by each unit, calculate and record the estimate of the 3-hour emissions from the 30-Meter using the Draeger Tube results, and include the person's initials. For cases where the 30-Meter Stack is not in use, the record may simply note the date, the time, the person's initials, and when emissions were no longer vented to the stack. Recordkeeping must resume once any emissions are exhausted to the stack. If electronic records are kept, MSCC must print the record monthly and retain a copy of the records on-site (ARM 17.8.1212).

Reporting

D.14. In accordance with Section 7 of the STIP, MSCC shall submit quarterly reports on a calendar-year basis. The quarterly reports shall be submitted within 30 days of the end of each calendar quarter. The quarterly reports shall be submitted to the Department's Permitting and Compliance Division office in Helena and the Billings Regional Office. The quarterly report format shall consist of both a comprehensive electronic-magnetic report and a written or hard copy data summary report (ARM 17.8.1212).

D.15. All compliance source test reports shall be submitted in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106 and ARM 17.8.1212).

D.16. The annual compliance certification required by Section V.B must contain a certification statement for the above applicable requirements (ARM 17.8.1212).

D.17. The semiannual monitoring report shall provide (ARM 17.8.1212):

a. Provide results of the Method 9 test; the actual test report must be submitted to the Department only upon request as specified by Section III.D.12;

b. Certification that the records required by Section III.D.13 were maintained;

c. Certification that the continuous stack flow rate monitor was operated and maintained and the data was used to determine stack gas flow rates in the quarterly reports;

d. Certification that quarterly reports were submitted to the Department as required by Section 7 of the STIP; and

e. A summary of the results of any required reference method tests performed during the reporting period.

E. EU5 Railroad Boiler (Sweet Gas Boiler)

Condition(s)	Pollutant/ Parameter	Permit Limit	Compliance Demonstration		Reporting Requirement
			Method	Frequency	
E.1, E.5, E.8, E.9, E.10, E.11, E.12, E.13	Opacity	40%	Burning low sulfur fuel gas or natural gas	Ongoing	Semiannual
E.2, E.5, E.8, E.11, E.12, E.13	Particulate Matter, Fuel Burning	$E=0.882*H^{-0.1664}$			
E.3, E.4, E.6, E.7, E8, E.9, E.10, E.11, E.12, E.13	SO_2	12 lb/3-hr and 5.0 tpy	Burning only natural gas or performing Draeger Tube testing and recording the SCFD of refinery gas consumed at the boiler	Ongoing	Quarterly
			Method 6/6C	As required by the Department and Section III.A.1	Semiannual

Conditions

E.1. MSCC shall not cause or authorize emissions to be discharged into the outdoor atmosphere from any source installed on or before November 23, 1968, that exhibit an opacity of 40% or greater averaged over six consecutive minutes (ARM 17.8.304(1)).

E.2. MSCC shall not cause or authorize particulate matter caused by the combustion of fuel to be discharged from any stack or chimney into the outdoor atmosphere in excess of the maximum allowable emissions of particulate matter for existing fuel burning equipment calculated by $E=0.882*H^{-0.1664}$ where H is the heat input capacity in MMBtu per hour and E is the maximum allowable particulate emissions rate in lbs. per MMBtu (ARM 17.8.309).

E.3. The combined SO_2 emissions from the auxiliary vent stacks associated with the Railroad Boiler, the H-1 Unit, the H1-A Unit, the H1-1 Unit, and the H1-2 Unit shall be limited to 12 lb/3-hour period (Board Order signed on June 12, 1998. This requirement is "State Only" until approval of the SIP by EPA.).

E.4. Once the ATS process begins operation, SO_2 emissions from the Railroad Boiler are limited to 5.0 tpy when vented to the 30-Meter Stack or its own local stack. The Railroad boiler may also vent to the 100-Meter Main Stack (ARM 17.8.749).

Compliance Demonstration

E.5. The compliance monitoring method required by this permit for opacity Section III.E.1 and the particulate limit Section III.E.2 may be satisfied by burning only natural gas and or low sulfur refinery fuel. Although these methods do not preclude the Department from initiating an enforcement action, if a Reference Method test indicates that one of these limits is being violated (ARM 17.8.1213).

E.6. As required by the Department and Section III.A.1, MSCC shall perform a Method 6/6C source test on the Railroad Boiler to monitor compliance with the emission limitations in Section III.E.4. The test methods shall conform to 40 CFR Part 60, Appendix A and the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106 and ARM 17.8.1213).

E.7. Burning only pipeline quality natural gas or its equivalent may satisfy the compliance monitoring methods required by this permit for Section III.E.3 and III.E.4. For cases where fuel other than natural gas is fired and the emissions are vented to any stack other than the 100-Meter Stack, MSCC shall record the daily SCFD of the gas consumed by the boiler and perform Draeger Tube Testing and recordkeeping as specified by Appendix E (ARM 17.8.1213).

Recordkeeping

E.8. MSCC shall maintain a record that includes entries of the following: the date; the time; the person's initials; the operating status of the Railroad Boiler; the stack exhausting emissions; the type of fuel(s) fired, the SCFD of any fuel fired other than natural gas; and calculate and record the engineering estimate of the 3-Hour SO_2 emissions from the Railroad Boiler. For cases where the boiler is not operating, the record may simply note the date, the time, the person's initials, and when the boiler was shut down, however, recordkeeping must resume once the boiler becomes operational. If electronic records are kept, MSCC must print the record monthly and retain a copy of the records on-site (ARM 17.8.1212).

E.9. All compliance source test recordkeeping shall be performed in accordance with the test method used and the Montana Source Test Protocol and Procedures Manual, and shall be maintained on site (or under facility's control*)* (ARM 17.8.106 and ARM 17.8.1212).

Reporting

E.10. Any compliance source test reports must be submitted in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106 and ARM 17.8.1212).

E.11. In accordance with Section 7 of the STIP, MSCC shall submit quarterly reports on a calendar-year basis. In addition, MSCC shall submit quarterly reports that identifies the type and quantity (SCFD) of natural gas and refinery fuel gas fired in the Railroad Boiler and the results of the Draeger Tube test results. The quarterly reports shall be submitted within 30 days of the end of each calendar quarter. The quarterly reports shall be submitted to the Department's Permitting and Compliance Division office in Helena and the Billings Regional Office. The quarterly report format shall consist of both a comprehensive electronic-magnetic report and a written or hard copy data summary report (ARM 17.8.1212).

E.12. The annual compliance certification required by Section V.B must contain a certification statement for the above applicable requirements (ARM 17.8.1212).

E.13. The semiannual monitoring report shall provide (ARM 17.8.1212):

a. Certification that SO_2 emissions were not in excess of the emission limits specified by Section III.E.3 and III.E.4 by submitting the Draeger Tube test results;

b. Certification that quarterly reports were submitted to the Department as required by Section III.E.11; and

c. A summary of the results of any required reference method tests performed during the reporting period.

F. EU6 Fuel Gas Boiler H-1, EU7 Fuel Gas Boiler H1-A, EU8 Fuel Gas Boiler H1-1, and EU9

Fuel Gas Boiler H1-2

Condition(s)	Pollutant/ Parameter	Permit Limit	Compliance Demonstration Method	Compliance Demonstration Frequency	Reporting Requirement
F.1, F.4, F.7, F.10, F.11	Opacity	40%	Burning natural gas or low sulfur fuel gas	Ongoing	Semiannual
F.2, F.4, F.7 F.10, F.11	Particulate Matter, Fuel Burning	$E=0.882*H^{-0.1664}$			
F.3, F.5, F.6, F.7, F.8, F.9, F.10, F.11	SO_2	12 lb/3-hr	Recordkeeping	Ongoing	Quarterly
			Burning only natural gas or performing Draeger Tube testing and recording the SCFD of refinery gas consumed at each boiler	Ongoing	Quarterly
			Method 6/6C	As required by the Department and Section III.A.1	Semiannual

Conditions

F.1. MSCC shall not cause or authorize emissions to be discharged into the outdoor atmosphere from any source installed on or before November 23, 1968, that exhibit an opacity of 40% or greater averaged over six consecutive minutes (ARM 17.8.304(1)).

F.2. MSCC shall not cause or authorize particulate matter caused by the combustion of fuel to be discharged from any stack or chimney into the outdoor atmosphere in excess of the maximum allowable emissions of particulate matter for existing fuel burning equipment calculated by $E=0.882*H^{-0.1664}$ where H is the heat input capacity in MMBtu per hour and E is the maximum allowable particulate emissions rate in lbs. per MMBtu (ARM 17.8.309).

F.3. The combined SO_2 emissions from the auxiliary vent stacks associated with the Railroad Boiler, the H-1 Unit, the H1-A Unit, the H1-1 Unit, and the H1-2 Unit shall be limited to 12 lb/3-hour period (Board Order signed on June 12, 1998. This requirement is "State Only" until approval of the SIP by EPA.).

Compliance Demonstration

F.4. The compliance monitoring method required by this permit for opacity Section III.F.1, and the particulate limit Section III.F.2 may be satisfied by burning only natural gas and or low sulfur refinery fuel gas. However, these methods do not preclude the Department from initiating an enforcement action if a Reference Method test indicates that one of these limits is being violated (ARM 17.8.1213).

F.5. Burning only pipeline quality natural gas or its equivalent may satisfy the compliance monitoring method required by this permit for Section III.F.3. For cases where refinery fuel gas is fired, MSCC shall record the daily SCFD of refinery gas consumed by each boiler and perform Draeger Tube Testing and recordkeeping as specified by Appendix E (ARM 17.8.1213).

F.6. As required by the Department and Section III.A.1, MSCC shall perform a Method 6/6C source

test on each boiler to monitor compliance with the emission limitation in Section III.F.3. The test methods shall conform to 40 CFR Part 60, Appendix A and the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106 and ARM 17.8.1213).

Recordkeeping

F.7. MSCC shall maintain a record that includes entries of the following: the date; the time; the person's initials; the operating status of each boiler; the stack(s) exhausting emissions; the SCFD of each fuel consumed by each boiler, and calculate and record the engineering estimate of the 3-Hour emissions from the 30- Meter Stack and the unit specific auxiliary stacks. For cases where boiler(s) are not operating, the record may simply note the date, the time, the person's initials, and when the boiler(s) were shut down, however, recordkeeping must resume once the boiler(s) become operational. If electronic records are kept, MSCC must print the record monthly and retain a copy of the records on-site (ARM 17.8.1212).

Reporting

F.8. Any compliance source test reports must be submitted in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106 and ARM 17.8.1212).

F.9. In accordance with Section 7 of the STIP, MSCC shall submit quarterly reports on a calendar-year basis. In addition, MSCC shall submit quarterly reports that identify the type and quantity (SCFD) of natural gas and refinery fuel gas fired in the Fuel Gas Boilers and the results of the Draeger Tube test results. The quarterly reports shall be submitted within 30 days of the end of each calendar quarter. The quarterly reports shall be submitted to the Department's Permitting and Compliance Division office in Helena and the Billings Regional Office. The quarterly report format shall consist of both a comprehensive electronic-magnetic report and a written or hard copy data summary report (ARM 17.8.1212).

F.10. The annual compliance certification required by Section V.B must contain a certification statement for the above applicable requirements (ARM 17.8.1212).

F.11. The semiannual monitoring report shall provide (ARM 17.8.1212):

a. Certification that SO_2 emissions were not in excess of the 12 lb/3-hour limit specified by Section III.F.3;

b. Certification that quarterly reports were submitted as required by Section III.F.9; and

c. A summary of the results of any required reference method tests performed during the reporting period.

G. EU10 17-MMBtu/hr Boiler

Condition(s)	Pollutant/ Parameter	Permit Limit	Compliance Demonstration Method	Compliance Demonstration Frequency	Reporting Requirement
G.1, G.7, G.12, G.13, G.14, G.15	Opacity	20%	Method 9	As required by the Department and Section III.A.1	Semiannual
G.2, G.8, G.12, G.13, G.14, G.15	Particulate Matter, Fuel Burning	$E=1.026*H^{-0.233}$	Method 5	As required by the Department and Section III.A.1	Semiannual
G.3, G.4, G.10, G.11, G.14, G.15	Boiler Stack	Vents to 100-Meter Stack for all fuels other than natural gas	Recordkeeping	Ongoing	Semiannual
G.5, G.9, G.10, G.11, G.14, G.15	Waste and Residual Oil	25,000 gallons/ rolling 12 month time period	Recordkeeping	Ongoing	Semiannual
G.6, G.9, G.10, G.11, G.14, G.15	Diesel Fuel	250,000 gallons/ rolling 12 month time period	Recordkeeping	Ongoing	Semiannual

Conditions

G.1. MSCC shall not cause or authorize emissions to be discharged into the outdoor atmosphere from any source that exhibit an opacity of 20% or greater averaged over six consecutive minutes (ARM 17.8.304(2)).

G.2. MSCC shall not cause or authorize particulate matter caused by the combustion of fuel to be discharged from any stack or chimney into the outdoor atmosphere in excess of $E=1.026*H^{-0.233.}$ Where H is the heat input capacity in MMBtu per hour and E is the maximum allowable particulate emission rate in lbs. per MMBtu (ARM 17.8.309(2)).

G.3. MSCC shall fire the 17-MMBtu/hr boiler exclusively on pipeline quality natural gas whenever emissions are vented to any stack other than the 100-Meter Stack (ARM 17.8.749).

G.4. MSCC shall vent emissions from the burning of any diesel or oil to the 100-Meter Stack (ARM 17.8.749).

G.5. MSCC is limited to burning 25,000 gallons of any waste or residual oil per rolling 12-month time period (ARM 17.8.749).

G.6. MSCC is limited to burning 250,000 gallons of diesel per rolling 12-month time period (ARM 17.8.749).

Compliance Demonstration

G.7. As required by the Department and Section III.A.1, MSCC shall perform a Method 9 test in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106 and ARM 17.8.1213).

G.8. As required by the Department and Section III.A.1, MSCC shall perform a Method 5 source test on the 17-MMBtu/hr Boiler to monitor compliance with the emission limitations in Section III.G.2. The test methods shall conform to 40 CFR Part 60, Appendix A and the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106 and ARM 17.8.1213).

G.9. MSCC shall document, by month, the total gallons of oil and/or diesel burned in the 17-MMBtu/hr boiler. By the 25th day of each month MSCC shall calculate the total gallons of oil and/or diesel burned in the 17-MMBtu/hr boiler during the previous month. The monthly information will be used to verify compliance with the rolling 12-month limitations in Section III.G.5 and III.G.6 (ARM 17.8.749 and ARM 17.8.1213).

Recordkeeping

G.10. MSCC shall maintain a record that includes entries of the following: the date; the time; the operating status of the 17-MMBtu/hr Boiler; the type of fuel(s) fired; the SCFD or gallons of each fuel consumed by the boiler, note the stack where the emissions are venting, and the person's initials. When the boiler is not operating, the record may simply note the date, the time, the person's initials, and when the boiler was shut down, however, recordkeeping must resume once the boiler becomes operational. If electronic records are kept, MSCC must print the record monthly and retain a copy of the records on-site (ARM 17.8.1212).

G11. MSCC shall document, by month, the total gallons of oil and/or diesel burned in the 17-MMBtu/hr boiler. By the 25th day of each month, MSCC shall total the total gallons of oil and/or diesel burned in the 17-MMBtu/hr boiler for the previous month. The monthly information will be used to verify compliance with the rolling 12-month limitation in Sections III.G.5 and III.G.6. The information for each of the previous months shall be submitted along with the annual emission inventory (ARM 17.8.749 and ARM 17.8.1212).

G.12. All compliance source test recordkeeping shall be performed in accordance with the test method used and the Montana Source Test Protocol and Procedures Manual, and shall be maintained on site (or under facility's control) (ARM 17.8.106 and ARM 17.8.1212).

Reporting

G.13. Any compliance source test reports must be submitted in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106 and ARM 17.8.1212).

G.14. The annual compliance certification required by Section V.B must contain a certification statement for the above applicable requirements (ARM 17.8.1212).

G.15. The semiannual monitoring report shall provide (ARM 17.8.1212):

a. Certification that the records required by Section III.G.10 and III.G.11 were maintained;

b. A summary of the types and quantities of fuel burned in the boiler;

c. Certification that the emissions from the boiler were vented to the appropriate stack; and

d. A summary of the results of any required reference method tests performed during the reporting period.

H. EU11 Redundant Incinerator and EU11a Existing Incinerator

Condition(s)	Pollutant/ Parameter	Permit Limit	Compliance Demonstration Method	Compliance Demonstration Frequency	Reporting Requirement
H.1, H.6, H.8, H.10, H.12	Opacity	20%	Method 9	As required by the Department and Section III.A.1	Semiannual
H.2, H.6, H.8, H.10, H.12	Opacity	40%	Method 9	As required by the Department and Section III.A.1	Semiannual
H.3, H.7, H.8, H.10, H.12	Particulate Matter, Fuel Burning	$E=0.882*H^{-0.1664}$ and/or $E=1.026*H^{-0.233}$	Method 5	As required by the Department and Section III.A.1	Semiannual
H.4, H.9, H.11, H.12	Redundant Incinerator Stack	Vents to 100-Meter Stack, 30-Meter Stack or the ATS Unit	Recordkeeping	Ongoing	Quarterly
H.5, H.9, H.11, H.12	SCFD of Fuel Gas	--------	Recordkeeping	Ongoing	Quarterly

Conditions

H.1. MSCC shall not cause or authorize emissions to be discharged into the outdoor atmosphere from the Redundant Incinerator that exhibit opacity of 20% or greater averaged over six consecutive minutes (ARM 17.8.304(2)).

H.2. MSCC shall not cause or authorize emissions to be discharged into the outdoor atmosphere from the Existing Incinerator that exhibit opacity of 40% or greater averaged over six consecutive minutes (ARM 17.8.304(1)).

H.3. The particulate emissions from fuel burning shall not exceed the value calculated by $E=0.882*H^{-0.1664}$ for existing equipment installed prior to November 23, 1960, and/or $E=1.026*H^{-0.233}$ for new fuel burning equipment where H is the heat input capacity in MMBtu per hour and E is the maximum allowable particulate emissions rate in lbs. per MMBtu (ARM 17.8.309).

H.4. MSCC shall vent emissions from the Redundant Incinerator to the 100-Meter Stack, the 30-Meter Stack, or the ATS Unit. When venting to the 30-Meter Stack, MSCC shall use pipeline quality natural gas as fuel (ARM 17.8.749).

Compliance Demonstration

H.5. MSCC shall monitor and record the SCFD of fuel gas consumed by the Existing and Redundant Incinerators. Monitoring shall begin within 180 days of the completion of construction of the Redundant Incinerator (ARM 17.8.749 and ARM 17.8.1213).

H.6. As required by the Department and Section III.A.1, MSCC shall perform a Method 9 test in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106 and ARM 17.8.1213).

H.7. As required by the Department and Section III.A.1, MSCC shall perform a Method 5 source test

on the Redundant Incinerator to monitor compliance with the emission limitations in Section III.H.3. The test methods shall conform to 40 CFR Part 60, Appendix A and the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106 and ARM 17.8.1213).

Recordkeeping

H.8. All compliance source test recordkeeping shall be performed in accordance with the test method used and the Montana Source Test Protocol and Procedures Manual, and shall be maintained on site (or under facility's control) (ARM 17.8.106 and ARM 17.8.1212).

H.9. MSCC shall maintain a record that includes entries of the following: the date; the time; the person's initials; the operating status of the Incinerators; where each Incinerator is exhausting its emissions; and record the daily SCFD of refinery fuel gas consumed by both incinerators. When an Incinerator(s) is not operating, the record may simply note the date, the time, the person's initials, and when the incinerator(s) was shut down, however, recordkeeping must resume once the incinerator(s) becomes operational. If electronic records are kept, MSCC must print the record monthly and retain a copy of the records on-site (ARM 17.8.1212).

Reporting

H.10. Any compliance source test reports must be submitted in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106 and ARM 17.8.1212).

H.11. Once the monitoring and recordkeeping requirements are triggered, MSCC shall submit quarterly emission reports within 30 days of the end of each calendar quarter. The report shall include the types and quantities (SCF) of gas fired in the incinerators during the quarter.

H.12. The annual compliance certification required by Section V.B must contain a certification statement for the above applicable requirements (ARM 17.8.1212).

H.13. The semiannual monitoring report shall provide (ARM 17.8.1212):

a. Certification that the records required by Section III.H.9 were maintained;

b. A summary of the types and amounts of fuel burned in the Incinerator(s);

c. Certification that the emissions from the Redundant Incinerator were routed to the appropriate stack;

d. A summary of the results of any required reference method tests performed during the reporting period.

I. EU12 80-foot West Flare, EU13 125 foot East Flare (near Monaca Process) and EU14 100-Meter West Flare (located on 100-Meter SRU Stack)

Condition(s)	Pollutant/ Parameter	Permit Limit	Compliance Demonstration Method	Compliance Demonstration Frequency	Reporting Requirement
I.1, I.5, I.7, I.9, I.13, I.14	Opacity	40%	Method 9	As required by the Department and Section III.A.1	Semiannual
I.2, I.5, I.7, I.9, I.13, I.14	Opacity	20%	Method 9	As required by the Department and Section III.A.1	Semiannual
I.3, I.6, I.8, I.10, I.11, I.12, I.13, I.14	SO_2	Minor Flaring and 150 lb/3 hr	Recordkeeping & Corrective Action	Ongoing	Quarterly
I.4, I.6, I.8, I.13, I.14	SO_2	271 ton/yr	Recordkeeping & Corrective Action	Ongoing	Semiannual

Conditions

I.1. MSCC shall not cause or authorize emissions to be discharged into the outdoor atmosphere from the 80-foot West Flare that exhibit an opacity of 40% or greater averaged over six consecutive minutes (ARM 17.8.304(1)).

I.2. MSCC shall not cause or authorize emissions to be discharged into the outdoor atmosphere from the 125-foot East Flare (near Monaca Process) and the 100-Meter West Flare (located on 100-Meter SRU Stack that exhibit an opacity of 20% or greater averaged over six consecutive minutes (ARM 17.8.304(2)).

I.3. Except for minor flaring events, MSCC shall minimize SO_2 emissions from flaring. In addition, when flaring of sulfur bearing gases occurs due to a malfunction, MSCC shall take immediate action to correct the malfunction (Exhibit A-1 of Board Order signed on June 12, 1998. This requirement is "State Only.").

I.4. Once the ATS process becomes operational, SO_2 emissions from the 80-foot West Flare, the 125-foot East Flare (near Monaca Process) and the 100-Meter West Flare (located on 100-Meter SRU Stack) are limited to a combined total of 271 tons/year (ARM 17.8.749).

Compliance Demonstration

I.5. MSCC shall monitor compliance with the opacity limitation by performing Method 9 testing as required by the Department and Section III.A.1 (ARM 17.8.1213).

I.6. For flaring events in excess of 150 lb/3-hr period MSCC shall comply with the reporting requirements identified in Section (3)(A)(5) of Exhibit A-1 of the STIP (Board Order signed on June 12, 1998. This requirement is "State Only.") (ARM 17.8.1213).

Recordkeeping

I.7. All compliance source test recordkeeping shall be performed in accordance with the test method used and the Montana Source Test Protocol and Procedures Manual, and shall be maintained on site (or under facility's control) (ARM 17.8.106 and ARM 17.8.1212).

I.8. MSCC shall maintain a record of all flaring events in excess of 50 pounds of SO_2 over any 8 non-

overlapping 3-hour periods in a calendar day. Each entry shall include the date; the time; the duration; the flare at which the event occurred; an engineering estimate of the 3-hour emissions; the measured flow rate to the flare, if available; a description of the source and estimated equivalent sulfur content of the gases directed to the flare; a reason for the flaring event; a description of the immediate actions taken to correct the situation; and the person's initials (ARM 17.8.1212).

Reporting

I.9. Any compliance source test reports must be submitted in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106 and ARM 17.8.1212).

I.10. For flaring events in excess of 150 lbs/3-hr period MSCC shall comply with the reporting requirements identified in Section (3)(A)(5) of Exhibit A-1 of the STIP (Board Order signed on June 12, 1998. This requirement is "State Only.") (ARM 17.8.1212).

I.11. In accordance with Section 7 of the STIP, MSCC shall submit quarterly reports on a calendar year basis. In addition, MSCC shall submit quarterly reports that identifies the type and quantity (SCFD) of natural gas and refinery fuel gas fired in the Fuel Gas Boilers and the results of the Draeger Tube test results (ARM 17.8.1212).

I.12. MSCC shall submit a quarterly report, which includes all the SO_2 emissions from the sulfur recovery facilities that result from the bypassing of 100-Meter Stack to the flares. The report must include the time, duration, and quantity of pollutants emitted and the reasons for the bypass. Flaring events shall be summarized daily and submitted along with the quarterly report in accordance with the provisions of the STIP. The quarterly reports shall be submitted to the Department's Permitting and Compliance Division office in Helena and the Billings Regional Office. The quarterly report format shall consist of both a comprehensive electronic-magnetic report and a written or hard copy data summary report (ARM 17.8.1212).

I.13. The annual compliance certification required by Section V.B must contain a certification statement for the above applicable requirements (ARM 17.8.1212).

I.14. The semiannual monitoring report shall provide (ARM 17.8.1212):

a. Certification that the reporting requirements were met as specified by Section III.I.10;

b. Certification that the flaring only occurred as specified by Section III.I.2;

c. A summary of the flare emissions reported during the period including the number of events, estimated emissions from each event, and the estimated quantity of emissions for the period; and

d. A summary of the results of any required reference method tests performed during the reporting period.

J. EU15 Hydrogen Plant

Condition(s)	Pollutant/ Parameter	Permit Limit	Compliance Demonstration Method	Compliance Demonstration Frequency	Reporting Requirement
J.1, J.4, J.7, J.10, J.11	Opacity	20%	Method 9	As required by the Department and Section III.A.1	Semiannual
J.2, J.5, J.7, J.10, J.11	Particulate Matter, Fuel Burning	$E=1.026*H^{-0.233}$	Method 5	As required by the Department and Section III.A.1	Semiannual
J.3, J.6, J.7, J.8, J.9, J.9, J.10, J.11	NO_X	22.72 ton/year and 125 lb/day	Record type and SCF of gas burned	Ongoing	Quarterly
			Method 7/7E	As required by the Department and Section III.A.1	Semiannual

Conditions

J.1. MSCC shall not cause or authorize emissions to be discharged into the outdoor atmosphere from any source that exhibit an opacity of 20% or greater averaged over six consecutive minutes (ARM 17.8.304(2)).

J.2. MSCC shall not cause or authorize particulate matter caused by the combustion of fuel to be discharged from any stack or chimney into the outdoor atmosphere in excess of rate calculated by: $E = 1.026 * H^{-0.233}$ for new fuel burning equipment, where: H = heat input capacity in MMBtu/hr and E = maximum allowable emission rate in lbs/MMBtu (ARM 17.8.309).

J.3. NO_X (reported as NO_2) emissions from the Hydrogen Plant shall be limited to 22.72 ton/yr and 125 lb/day (ARM 17.8.752).

Compliance Demonstration

J.4. As required by the Department and Section III.A.1, MSCC shall perform a Method 9 test in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106 and ARM 17.8.1213).

J.5. As required by the Department and Section III.A.1, MSCC shall perform a Method 5 source test on the Hydrogen Plant to monitor compliance with the emission limitations in Section III.J.2. The test methods shall conform to 40 CFR Part 60, Appendix A and the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106 and ARM 17.8.1213).

J.6. As required by the Department and Section III.A.1, MSCC shall perform a Method 7/7E source test, or other tests as approved by the Department, on the Hydrogen Plant Stack to monitor compliance with the emission limitations in Section III.J.3. The test methods shall conform to 40 CFR Part 60, Appendix A and the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106 and ARM 17.8.1213).

Recordkeeping

J.7. All compliance source test recordkeeping shall be performed in accordance with the test method used and the Montana Source Test Protocol and Procedures Manual, and shall be maintained on site (or under facility's control) (ARM 17.8.106 and ARM 17.8.1212).

J.8. MSCC shall maintain a record that includes entries of the following: the date; the time; the person's initials; the operating status of the Hydrogen Plant; the type of fuel(s) fired, and the SCFD of any fuel fired. For cases where the boiler is not operating, the record may simply note the date, the time, the person's initials, and when the Hydrogen Plant was shut down, however, recordkeeping must resume once the Hydrogen Plant becomes operational. If electronic records are kept, MSCC must print the record monthly and retain a copy of the records on-site (ARM 17.8.1212).

Reporting

J.9. MSCC shall submit quarterly reports that identifies the type and quantity (SCFD) of natural gas and refinery fuel gas fired in the Hydrogen Plant. The quarterly reports shall be submitted within 30 days of the end of each calendar quarter. The quarterly reports shall be submitted to the Department's Permitting and Compliance Division office in Helena and the Billings Regional Office. The quarterly report format shall consist of both a comprehensive electronic-magnetic report and a written or hard copy data summary report (ARM 17.8.1212).

J.10. Any compliance source test reports must be submitted in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106 and ARM 17.8.1212).

J.11. The annual compliance certification required by Section V.B must contain a certification statement for the above applicable requirements (ARM 17.8.1212).

J.12. The semiannual monitoring report shall provide (ARM 17.8.1212):

a. Certification that the records required by Section III.J.8 were maintained;

b. Certification that quarterly reports were submitted to the Department as required by Section III.J.9.

c. A summary of the results of any required reference method tests performed during the reporting period.

K. EU16 Liquid H_2S and Compressor Unit

Condition(s)	Pollutant/ Parameter	Permit Limit	Compliance Demonstration Method	Compliance Demonstration Frequency	Reporting Requirement
K.1, K.2, K.3, K.4, K.5	H_2S	82 tons of gas/day	Log	Ongoing	Semiannual

Conditions

K.1. MSCC shall not process more than 82 tons of H_2S per day in the liquefaction unit (ARM 17.8.749).

Compliance Demonstration

K.2. MSCC shall limit production of H_2S in the liquefaction unit to 82 tons of H_2S per day (ARM 17.8.1213).

Recordkeeping

K.3. MSCC shall maintain a log to verify that production of H_2S in the liquefaction unit was limited to 82 tons of H_2S per day (ARM 17.8.749 and ARM 17.8.1212).

Reporting

K.4. The annual compliance certification required by Section V.B must contain a certification statement for the above applicable requirements (ARM 17.8.1212).

K.5. The semiannual monitoring report shall provide the log required in K.3, provide a summary of the dates operated, and any instances of noncompliance. (ARM 17.8.1212):

L. EU17 ATS Quench Water Evaporator-Treater-Cooling Towers (2)

Condition(s)	Pollutant/ Parameter	Permit Limit	Compliance Demonstration Method	Compliance Demonstration Frequency	Reporting Requirement
L.1, L.4, L.7, L.8, L.9, L.10	Opacity	20%	Method 9	As required by the Department and Section III.A.1	Annual
L.2, L.5, L.7, L.8, L.9, L.10	SO_2	57.52 ton/yr and 315.1 lb/day	Method 6/6C	As required by the Department and Section III.A.1	Annual
L.3, L.6, L.7, L.8, L.9, L.10	Ammonia	0.7 ton/yr and 3.83 lb/day	Standard Method 417B	As required by the Department and Section III.A.1	Annual

Conditions

L.1. MSCC shall not cause or authorize emissions to be discharged into the outdoor atmosphere from any source that exhibit an opacity of 20% or greater averaged over six consecutive minutes (ARM 17.8.304(2)).

L.2. SO_2 emissions from the 2 Quench Water Evaporator-Treater-Cooling are limited to 57.52 ton/yr and 315.1 lb/day (ARM 17.8.749).

L.3. Ammonia emissions from the 2 Quench Water Evaporator-Treater-Cooling Towers are limited to 0.70 ton/yr and 3.83 lb/day (ARM 17.8.749).

Compliance Demonstration

L.4. As required by the Department and Section III.A.1, MSCC shall perform a Method 9 test in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106 and ARM 17.8.1213).

L.5. As required by the Department and Section III.A.1, MSCC shall perform a Method 6/6C source test in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106 and ARM 17.8.1213).

L.6. As required by the Department, MSCC shall perform Standard Method 417B test, or other tests as approved by the Department, in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106 and ARM 17.8.1213).

Recordkeeping

L.7. All compliance source test recordkeeping shall be performed in accordance with the test method used and the Montana Source Test Protocol and Procedures Manual, and shall be maintained on site (or under facility's control) (ARM 17.8.106 and ARM 17.8.1212).

Reporting

L.8. Any compliance source test reports must be submitted in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106 and ARM 17.8.1212).

L.9. The annual compliance certification required by Section V.B must contain a certification statement for the above applicable requirements (ARM 17.8.1212).

L.10. The semiannual monitoring report shall provide (ARM 17.8.1212): The semiannual monitoring reports are not required for these sources.

M. EU18 Molten Sulfur Storage, EU18a Molten Sulfur Storage in Railcars and Mobile Tanks, EU19 Molten Sulfur Loadout, EU20 Molten Sulfur Run-down Pits, EU21 Fertilizer Manufacture, Conveying and Loadout; and EU22 Sulfur Product Manufacture, Conveying and Loadout

Condition(s)	Pollutant/ Parameter	Permit Limit	Compliance Demonstration Method	Compliance Demonstration Frequency	Reporting Requirement
M.1, M.2, M.3, M.4, M.5, M.6	Opacity	20%	Method 9	As required by the Department and Section III.A.1	Annual

Conditions

M.1. MSCC shall not cause or authorize emissions to be discharged into the outdoor atmosphere from any source that exhibit an opacity of 20% or greater averaged over six consecutive minutes (ARM 17.8.304(2)).

Compliance Demonstration

M.2. As required by the Department and Section III.A.1, MSCC shall perform a Method 9 test in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106 and ARM 17.8.1213).

Recordkeeping

M.3. All compliance source test recordkeeping shall be performed in accordance with the test method used and the Montana Source Test Protocol and Procedures Manual, and shall be maintained on site (or under facility's control) (ARM 17.8.106 and ARM 17.8.1212).

Reporting

M.4. Any compliance source test reports must be submitted in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106 and ARM 17.8.1212).

M.5. The annual compliance certification required by Section V.B must contain a certification statement for the above applicable requirements (ARM 17.8.1212).

M.6. The semiannual monitoring report shall provide (ARM 17.8.1212): The semiannual compliance

monitoring reports are not required for these sources.

N. EU23 Various Valves, Pumps and Flanges Leaks

Condition(s)	Pollutant/ Parameter	Permit Limit	Compliance Demonstration Method	Compliance Demonstration Frequency	Reporting Requirement
N.1, N.2, N.3, N.4, N.5, N.6	Opacity	20%	Method 9	As required by the Department and Section III.A.1	Annual

Conditions

N.1. MSCC shall not cause or authorize emissions to be discharged into the outdoor atmosphere from any source that exhibit an opacity of 20% or greater averaged over six consecutive minutes (ARM 17.8.304(2)).

Compliance Demonstration

N.2. As required by the Department and Section III.A.1, MSCC shall perform a Method 9 test in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106 and ARM 17.8.1213).

Recordkeeping

N.3. All compliance source test recordkeeping shall be performed in accordance with the test method used and the Montana Source Test Protocol and Procedures Manual, and shall be maintained on site (or under facility's control) (ARM 17.8.106 and ARM 17.8.1212).

Reporting

N.4. Any compliance source test reports must be submitted in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106 and ARM 17.8.1212).

N.5. The annual compliance certification required by Section V.B must contain a certification statement for the above applicable requirements (ARM 17.8.1212).

N.6. The semiannual monitoring report shall provide (ARM 17.8.1212): The semiannual monitoring reports are not required for these sources.

O. EU24 Boiler Treatment Lagoon with Aeration

Condition(s)	Pollutant/ Parameter	Permit Limit	Compliance Demonstration Method	Compliance Demonstration Frequency	Reporting Requirement
O.1, O.2, O.3, O.4, O.5, O.6	Opacity	40%	Method 9	As required by the Department and Section III.A.1	Annual

Conditions

O.1. MSCC shall not cause or authorize emissions to be discharged into the outdoor atmosphere from any source that exhibit an opacity of 20% or greater averaged over six consecutive minutes (ARM 17.8.304(2)).

Compliance Demonstration

O.2. As required by the Department and Section III.A.1, MSCC shall perform a Method 9 test in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106 and ARM 17.8.1213).

Recordkeeping

O.3. All compliance source test recordkeeping shall be performed in accordance with the test method used and the Montana Source Test Protocol and Procedures Manual, and shall be maintained on site (or under facility's control) (ARM 17.8.106 and ARM 17.8.1212).

Reporting

O.4. Any compliance source test reports must be submitted in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106 and ARM 17.8.1212).

O.5. The annual compliance certification required by Section V.B must contain a certification statement for the above applicable requirements (ARM 17.8.1212).

O.6. The semiannual monitoring report shall provide (ARM 17.8.1212): The semiannual monitoring reports are not required for these sources.

P. EU25 Fugitive Emissions - Access Roads

Condition(s)	Pollutant/ Parameter	Permit Limit	Compliance Demonstration Method	Compliance Demonstration Frequency	Reporting Requirement
P.1, P.2, P.3, P.4, P.5, P.6	Opacity	40%	Method 9	As required by the Department and Section III.A.1	Annual

Conditions

P.1. MSCC shall not cause or authorize emissions to be discharged into the outdoor atmosphere from any source that exhibit an opacity of 20% or greater averaged over six consecutive minutes (ARM 17.8.304(2)).

Compliance Demonstration

P.2. As required by the Department and Section III.A.1, MSCC shall perform a Method 9 test in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106 and ARM 17.8.1213).

Recordkeeping

P.3. All compliance source test recordkeeping shall be performed in accordance with the test method used and the Montana Source Test Protocol and Procedures Manual, and shall be maintained on site (or under facility's control) (ARM 17.8.106 and ARM 17.8.1212).

Reporting

P.4. Any compliance source test reports must be submitted in accordance with the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106 and ARM 17.8.1212).

P.5. The annual compliance certification required by Section V.B must contain a certification

statement for the above applicable requirements (ARM 17.8.1212).

P.6. The semiannual monitoring report shall provide (ARM 17.8.1212): The semiannual compliance monitoring reports are not required for these sources.

SECTION IV. NON-APPLICABLE REQUIREMENTS

Air Quality Administrative Rules of Montana (ARM) and Federal Regulations identified as not applicable to the facility or to a specific emissions unit at the time of the permit issuance are listed below (ARM 17.8.1214). The following list does not preclude the need to comply with any new requirements that may become applicable during the permit term.

A. Facility-Wide

The following table contains non-applicable requirements that are administrated by the Air Resources Management Bureau of the Department of Environmental Quality.

Rule Citation		Reason
State	**Federal**	
	40 CFR 60, Subparts C- Z; 40 CFR 60, Subparts AA-EE; 40 CFR 60, Subparts GG-HH; 40 CFR 60, Subparts KK-NN; 40 CFR 60, Subparts PP-XX; 40 CFR 60, Subparts AAA-BBB; 40 CFR 60, Subparts DDD-FFF; 40 CFR 60, Subparts GGG-LLL; 40 CFR 60, Subparts NNN-VVV; 40 CFR 61, Subparts B-F; 40 CFR 61, Subparts H- R; 40 CFR 61, Subpart T; 40 CFR 61, Subpart V; 40 CFR 61, Subpart W; 40 CFR 61, Subparts Y, BB, and FF. 40 CFR 63, Subpart F; 40 CFR 63, Subpart G-I; 40 CFR 63, Subpart L; 40 CFR 63, Subpart M; 40 CFR 63, Subpart Q; 40 CFR 63, Subpart T; 40 CFR 63, Subpart W-Y; 40 CFR 63, Subpart CC; 40 CFR 63, Subpart EE; 40 CFR 63, Subpart GG; 40 CFR 63, Subpart II; 40 CFR 63, Subpart JJ;	These requirements are not applicable because the facility is not an affected source under these regulations.
	40 CFR 72 - 78;	The facility is not in this source category.
	40 CFR 82 (Except subparts B&F).	This rule refers to a process, equipment, or activity that is not used at this facility.
ARM 17.8.321 ARM 17.8.323 ARM 17.8.324 (Except ARM 324(1) and ARM 324(3)).		These rules are not applicable because the facility is not listed in the source category cited in the rules.
ARM 17.8.316 ARM 17.8.320 ARM 17.8.330 - 334		These rules are not applicable because the facility does not have the specific emissions unit cited in the rules.

B. Emission Units

The permit application identified applicable requirements: non-applicable requirements for individual or specific emission units were not listed. The Department has listed all non-applicable requirements in Section IV.A, these requirements relate to each specific unit, as well as facility wide.

SECTION V. GENERAL PERMIT CONDITIONS

A. Compliance Requirements

ARM 17.8, Subchapter 12, Operating Permit Program §1210(2)(a)-(c)&(e), §1206(6)(c)&(b)

1. The permittee must comply with all conditions of the permit. Any noncompliance with the terms or conditions of the permit constitutes a violation of the Montana Clean Air Act, and may result in enforcement action, permit modification, revocation and reissuance, or termination, or denial of a permit renewal application under ARM Title 17, Chapter 8, Subchapter 12.

2. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.

3. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit. If appropriate, this factor may be considered as a mitigating factor in assessing a penalty for noncompliance with an applicable requirement if the source demonstrates that both the health, safety or environmental impacts of halting or reducing operations would be more serious than the impacts of continuing operations, and that such health, safety or environmental impacts were unforeseeable and could not have otherwise been avoided.

4. The permittee shall furnish to the Department, within a reasonable time set by the Department (not to be less than 15 days), any information that the Department may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit, or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Department copies of those records that are required to be kept pursuant to the terms of the permit. This subsection does not impair or otherwise limit the right of the permittee to assert the confidentiality of the information requested by the Department, as provided in 75-2-105, MCA.

5. Any schedule of compliance for applicable requirements with which the source is not in compliance with at the time of permit issuance shall be supplemental to, and shall not sanction noncompliance with, the applicable requirements on which it was based.

6. For applicable requirements that will become effective during the permit term, the source shall meet such requirements on a timely basis unless a more detailed plan or schedule is required by the applicable requirement or the Department.

B. Certification Requirements

ARM 17.8, Subchapter 12, Operating Permit Program §1207 and §1213(7)(a)&(c)-(d)

1. Any application form, report, or compliance certification submitted pursuant to ARM Title 17, Chapter 8, Subchapter 12, shall contain certification by a responsible official of truth, accuracy and completeness. This certification and any other certification required under ARM Title 17, Chapter 8, Subchapter 12, shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate and complete.

2. Compliance certifications shall be submitted by February 15 of each year, or more frequently if otherwise specified in an applicable requirement or elsewhere in the permit. Each certification must include the required information for the previous calendar year (i.e., January 1 –

December 31).

3. Compliance certifications shall include the following:

   a. The identification of each term or condition of the permit that is the basis of the certification;

   b. The identification of the method(s) or other means used by the owner or operator for determining the status of compliance with each term and condition during the certification period, consistent with ARM 17.8.1212;

   c. The status of compliance with each term and condition for the period covered by the certification, *including whether compliance during the period was continuous or intermittent* (based on the method or means identified in ARM 17.8.1213(7)(c)(ii), as described above); and

   d. Such other facts as the Department may require to determine the compliance status of the source.

4. All compliance certifications must be submitted to the Environmental Protection Agency, as well as to the Department, at the addresses listed in the Notification Addresses Appendix of this permit.

C. Permit Shield

ARM 17.8, Subchapter 12, Operating Permit Program §1214(1)-(4)

1. The applicable requirements and non-federally enforceable requirements are included and specifically identified in this permit and the permit includes a precise summary of the requirements not applicable to the source. Compliance with the conditions of the permit shall be deemed compliance with any applicable requirements and any non-federally enforceable requirements as of the date of permit issuance.

2. The permit shield described in 1 above shall remain in effect during the appeal of any permit action (renewal, revision, reopening, or revocation and reissuance) to the Board of Environmental Review (Board), until such time as the Board renders its final decision.

3. Nothing in this permit alters or affects the following:

   a. The provisions of Sec. 7603 of the FCAA, including the authority of the administrator under that section;

   b. The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance;

   c. The applicable requirements of the Acid Rain Program, consistent with Sec. 7651g(a) of the FCAA;

   d. The ability of the administrator to obtain information from a source pursuant to Sec. 7414 of the FCAA;

   e. The ability of the Department to obtain information from a source pursuant to the Montana Clean Air Act, Title 75, Chapter 2, MCA;

   f. The emergency powers of the Department under the Montana Clean Air Act, Title 75,

Chapter 2, MCA; and

g. The ability of the Department to establish or revise requirements for the use of Reasonably Available Control Technology (RACT) as defined in ARM Title 17, Chapter 8. However, if the inclusion of a RACT into the permit pursuant to ARM Title 17, Chapter 8, Subchapter 12, is appealed to the Board, the permit shield, as it applies to the source's existing permit, shall remain in effect until such time as the Board has rendered its final decision.

4. Nothing in this permit alters or affects the ability of the Department to take enforcement action for a violation of an applicable requirement or permit term demonstrated pursuant to ARM 17.8.106, Source Testing Protocol.

5. Pursuant to ARM 17.8.132, for the purpose of submitting a compliance certification, nothing in these rules shall preclude the use, including the exclusive use, of any credible evidence or information relevant to whether a source would have been in compliance. However, when compliance or noncompliance is demonstrated by a test or procedure provided by permit or other applicable requirements, the source shall then be presumed to be in compliance or noncompliance unless that presumption is overcome by other relevant credible evidence.

6. The permit shield will not extend to minor permit modifications or changes not requiring a permit revision (see Sections I & J).

7. The permit shield will extend to significant permit modifications and transfer or assignment of ownership (see Sections K & N).

D. Monitoring, Recordkeeping, and Reporting Requirements
ARM 17.8, Subchapter 12, Operating Permit Program §1212(2)&(3)

1. Unless otherwise provided in this permit, the permittee shall maintain compliance monitoring records that include the following information:

   a. The date, place as defined in the permit, and time of sampling or measurement;

   b. The date(s) analyses were performed;

   c. The company or entity that performed the analyses;

   d. The analytical techniques or methods used;

   e. The results of such analyses; and

   f. The operating conditions at the time of sampling or measurement.

2. The permittee shall retain records of all required monitoring data and support information for a period of at least 5 years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit. All monitoring data, support information, and required reports and summaries may be maintained in computerized form at the plant site if the information is made available to Department personnel upon request, which may be for either hard copies or computerized format. Strip-charts must be maintained in their original form at the plant site and shall be made available to Department personnel upon request.

3. The permittee shall submit to the Department, at the addresses located in the Notification Addresses Appendix of this permit, reports of any required monitoring by February 15 and August 15 of each year, or more frequently if otherwise specified in an applicable requirement or elsewhere in the permit. The monitoring report submitted on February 15 of each year must include the required monitoring information for the period of July 1 through December 31 of the previous year. The monitoring report submitted on August 15 of each year must include the required monitoring information for the period of January 1 through June 30 of the current year. All instances of deviations from the permit requirements must be clearly identified in such reports. All required reports must be certified by a responsible official, consistent with ARM 17.8.1207.

E. Prompt Deviation Reporting

ARM 17.8, Subchapter 12, Operating Permit Program §1212(3)(c)

The permittee shall promptly report deviations from permit requirements, including those attributable to upset conditions as defined in the permit, the probable cause of such deviations, and any corrective actions or preventive measures taken. To be considered prompt, deviations shall be reported as part of the routine reporting requirements under ARM 17.8.1212(3)(b) and, if applicable, in accordance with the malfunction reporting requirements under ARM 17.8.110, unless otherwise specified in an applicable requirement.

F. Emergency Provisions

ARM 17.8, Subchapter 12, Operating Permit Program §1201(13) and §1214(5), (6)&(8)

1. An "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation and causes the source to exceed a technology-based emission limitation under this permit due to the unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of reasonable preventive maintenance, careless or improper operation, or operator error.

2. An emergency constitutes an affirmative defense to an action brought for noncompliance with a technology-based emission limitation if the permittee demonstrates through properly signed, contemporaneous logs, or other relevant evidence, that:

   a. An emergency occurred and the permittee can identify the cause(s) of the emergency;

   b. The permitted facility was at the time being properly operated;

   c. During the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in the permit; and

   d. The permittee submitted notice of the emergency to the Department within 2 working days of the time when emission limitations were exceeded due to the emergency. This notice fulfills the requirements of ARM 17.8.1212(3)(c). This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.

3. These emergency provisions are in addition to any emergency, malfunction or upset provision contained in any applicable requirement.

G. Inspection and Entry

ARM 17.8, Subchapter 12, Operating Permit Program §1213(3)&(4)

1. Upon presentation of credentials and other requirements as may be required by law, the permittee shall allow the Department, the administrator, or an authorized representative (including an authorized contractor acting as a representative of the Department or the administrator) to perform the following:

   a. Enter the premises where a source required to obtain a permit is located or emissions-related activity is conducted, or where records must be kept under the conditions of the permit;

   b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit;

   c. Inspect at reasonable times any facilities, emission units, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and

   d. As authorized by the Montana Clean Air Act and rules promulgated thereunder, sample or monitor, at reasonable times, any substances or parameters at any location for the purpose of assuring compliance with the permit or applicable requirements.

2. The permittee shall inform the inspector of all workplace safety rules or requirements at the time of inspection. This section shall not limit in any manner the Department's statutory right of entry and inspection as provided for in 75-2-403, MCA.

H. Fee Payment

ARM 17.8, Subchapter 12, Operating Permit Program §1210(2)(f) and ARM 17.8, Subchapter 5, Air Quality Permit Application, Operation, and Open Burning Fees §505(3)-(5) (STATE ONLY)

1. The permittee must pay application and operating fees, pursuant to ARM Title 17, Chapter 8, Subchapter 5.

2. Annually, the Department shall provide the permittee with written notice of the amount of the fee and the basis for the fee assessment. The air quality operation fee is due 30 days after receipt of the notice, unless the fee assessment is appealed pursuant to ARM 17.8.511. If any portion of the fee is not appealed, that portion of the fee that is not appealed is due 30 days after receipt of the notice. Any remaining fee, which may be due after the completion of an appeal, is due immediately upon issuance of the Board's decision or upon completion of any judicial review of the Board's decision.

3. If the permittee fails to pay the required fee (or any required portion of an appealed fee) within 90 days of the due date of the fee, the Department may impose an additional assessment of 15% of the fee (or any required portion of an appealed fee) or $100, whichever is greater, plus interest on the fee (or any required portion of an appealed fee), computed at the interest rate established under 15-31-510(3), MCA.

I. Minor Permit Modifications

ARM 17.8, Subchapter 12, Operating Permit Program §1226(3)&(11)

1. An application for a minor permit modification need only address in detail those portions of the permit application that require revision, updating, supplementation, or deletion, and may reference any required information that has been previously submitted.

2. The permit shield under ARM 17.8.1214 will not extend to any minor modifications processed pursuant to ARM 17.8.1226.

J. Changes Not Requiring Permit Revision
ARM 17.8, Subchapter 12, Operating Permit Program §1224(1)-(3), (5)&(6)

1. The permittee is authorized to make changes within the facility as described below, provided the following conditions are met:

   a. The proposed changes do not require the permittee to obtain an air quality preconstruction permit under ARM Title 17, Chapter 8, Subchapter 7;

   b. The proposed changes are not modifications under Title I of the FCAA, or as defined in ARM Title 17, Chapter 8, Subchapters 8, 9, or 10;

   c. The emissions resulting from the proposed changes do not exceed the emissions allowable under this permit, whether expressed as a rate of emissions or in total emissions;

   d. The proposed changes do not alter permit terms that are necessary to enforce applicable emission limitations on emission units covered by the permit; and

   e. The facility provides the administrator and the Department with written notification at least 7 days prior to making the proposed changes.

2. The permittee and the Department shall attach each notice provided pursuant to 1.e above to their respective copies of this permit.

3. Pursuant to the conditions above, the permittee is authorized to make Sec. 502(b)(10) changes, as defined in ARM 17.8.1201(30), without a permit revision. For each such change, the written notification required under 1.e above shall include a description of the change within the source, the date on which the change will occur, any change in emissions, and any permit term or condition that is no longer applicable as a result of the change.

4. The permittee may make a change not specifically addressed or prohibited by the permit terms and conditions without requiring a permit revision, provided the following conditions are met:

   a. Each proposed change does not weaken the enforceability of any existing permit conditions;

   b. The Department has not objected to such change;

   c. Each proposed change meets all applicable requirements and does not violate any existing permit term or condition; and

   d. The permittee provides contemporaneous written notice to the Department and the administrator of each change that is above the level for insignificant emission units as defined in ARM 17.8.1201(22) and 17.8.1206(3), and the written notice describes each such change, including the date of the change, any change in emissions, pollutants emitted, and any applicable requirement that would apply as a result of the change.

5. The permit shield authorized by ARM 17.8.1214 shall not apply to changes made pursuant to ARM 17.8.1224(3) and (5), but is applicable to terms and conditions that allow for increases and decreases in emissions pursuant to ARM 17.8.1224(4).

K. Significant Permit Modifications

ARM 17.8, Subchapter 12, Operating Permit Program §1227(1), (3)&(4)

1. The modification procedures set forth in 2 below must be used for any application requesting a significant modification of this permit. Significant modifications include the following:

   a. Any permit modification that does not qualify as either a minor modification or as an administrative permit amendment;

   b. Every significant change in existing permit monitoring terms or conditions;

   c. Every relaxation of permit reporting or recordkeeping terms or conditions that limit the Department's ability to determine compliance with any applicable rule, consistent with the requirements of the rule; or

   d. Any other change determined by the Department to be significant.

2. Significant modifications shall meet all requirements of ARM Title 17, Chapter 8, including those for applications, public participation, and review by affected states and the administrator, as they apply to permit issuance and renewal, except that an application for a significant permit modification need only address in detail those portions of the permit application that require revision, updating, supplementation or deletion.

3. The permit shield provided for in ARM 17.8.1214 shall extend to significant modifications.

L. Reopening for Cause

ARM 17.8, Subchapter 12, Operating Permit Program §1228(1)&(2)

This permit may be reopened and revised under the following circumstances:

1. Additional applicable requirements under the FCAA become applicable to the facility when the permit has a remaining term of 3 or more years. Reopening and revision of the permit shall be completed not later than 18 months after promulgation of the applicable requirement. No reopening is required under ARM 17.8.1228(1)(a) if the effective date of the applicable requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms or conditions have been extended pursuant to ARM 17.8.1220(12) or 17.8.1221(2);

2. Additional requirements (including excess emission requirements) become applicable to an affected source under the Acid Rain Program. Upon approval by the administrator, excess emission offset plans shall be deemed incorporated into the permit;

3. The Department or the administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emission standards or other terms or conditions of the permit; or

4. The administrator or the Department determines that the permit must be revised or revoked and reissued to ensure compliance with the applicable requirements.

M. Permit Expiration and Renewal

ARM 17.8, Subchapter 12, Operating Permit Program §1210(2)(g), §1220(11)&(12), and §1205(2)(d)

1. This permit is issued for a fixed term of five years.

2. Renewal of this permit is subject to the same procedural requirements that apply to permit issuance, including those for application, content, public participation, and affected state and administrator review.

3. Expiration of this permit terminates the permittee's right to operate unless a timely and administratively complete renewal application has been submitted consistent with ARM 17.8.1221 and 17.8.1205(2)(d). If a timely and administratively complete application has been submitted, all terms and conditions of the permit, including the application shield, remain in effect after the permit expires until the permit renewal has been issued or denied.

4. For renewal, the permittee shall submit a complete air quality operating permit application to the Department not later than 6 months prior to the expiration of this permit, unless otherwise specified. If necessary to ensure that the terms of the existing permit will not lapse before renewal, the Department may specify, in writing to the permittee, a longer time period for submission of the renewal application. Such written notification must be provided at least 1 year before the renewal application due date established in the existing permit.

N. Severability Clause
ARM 17.8, Subchapter 12, Operating Permit Program §1210(2)(i)&(l)

1. The administrative appeal or subsequent judicial review of the issuance by the Department of an initial permit under this subchapter shall not impair in any manner the underlying applicability of all applicable requirements, and such requirements continue to apply as if a final permit decision had not been reached by the Department.

2. If any provision of a permit is found to be invalid, all valid parts that are severable from the invalid part remain in effect. If a provision of a permit is invalid in one or more of its applications, the provision remains in effect in all valid applications that are severable from the invalid applications.

O. Transfer or Assignment of Ownership
ARM 17.8, Subchapter 12, Operating Permit Program §1225(2)&(4)

1. If an administrative permit amendment involves a change in ownership or operational control, the applicant must include in its request to the Department a written agreement containing a specific date for the transfer of permit responsibility, coverage and liability between the current and new permittee.

2. The permit shield provided for in ARM17.8.1214 shall not extend to administrative permit amendments.

P. Emissions Trading, Marketable Permits, Economic Incentives
ARM 17.8, Subchapter 12, Operating Permit Program §1226(2)

Notwithstanding ARM 17.8.1226(1) and (7), minor air quality operating permit modification procedures may be used for permit modifications involving the use of economic incentives, marketable permits, emissions trading, and other similar approaches, to the extent that such minor permit modification procedures are explicitly provided for in the Montana State Implementation Plan or in applicable requirements promulgated by the administrator.

Q. No Property Rights Conveyed
ARM 17.8, Subchapter 12, Operating Permit Program §1210(2)(d)

This permit does not convey any property rights of any sort, or any exclusive privilege.

R. Testing Requirements
ARM 17.8, Subchapter 1, General Provisions §105

The permittee shall comply with ARM 17.8.105.

S. Source Testing Protocol
ARM 17.8, Subchapter 1, General Provisions §106

The permittee shall comply with ARM 17.8.106.

T. Malfunctions
ARM 17.8, Subchapter 1, General Provisions §110

The permittee shall comply with ARM 17.8.110.

U. Circumvention
ARM 17.8, Subchapter 1, General Provisions §111

The permittee shall comply with ARM 17.8.111.

V. Motor Vehicles
ARM 17.8, Subchapter 3, Emission Standards §325

The permittee shall comply with ARM 17.8.325.

W. Annual Emissions Inventory
ARM 17.8, Subchapter 5, Air Quality Permit Application, Operation and Open Burning Fees §505 (STATE ONLY)

The permittee shall supply the Department with annual production and other information for all emission units necessary to calculate actual or estimated actual amount of air pollutants emitted during each calendar year. Information shall be gathered on a calendar-year basis and submitted to the Department by the date required in the emission inventory request, unless otherwise specified in this permit. Information shall be in the units required by the Department.

X. Open Burning
ARM 17.8, Subchapter 6, Open Burning §604, 605 and 606

The permittee shall comply with ARM 17.8.604, 605 and 606.

Y. Montana Air Quality Permits
ARM 17.8, Subchapter 7, Permit, Construction and Operation of Air Contaminant Sources §745 and 764 (ARM 17.8.745(1) and 764(1)(b) are STATE ENFORCEABLE ONLY until approval by the EPA as part of the SIP)

1. Except as specified, no person shall construct, install, alter or use any air contaminant source or stack associated with any source without first obtaining a permit from the Department or Board. A permit is not required for those sources or stacks as specified by ARM 17.8.744(1)(a)-(k).

2. The permittee shall comply with ARM 17.8.743, 744, 745, 748, and 764.

3. ARM 17.8.745(1) specifies de minimis changes as construction or changed conditions of operation at a facility holding an air quality preconstruction permit issued under Chapter 8 that does not increase the facility's potential to emit by more than 15 tons per year of any pollutant, except (STATE ENFORCEABLE ONLY until approved by the EPA as part of the SIP):

   a. Any construction or changed condition that would violate any condition in the facility's existing air quality preconstruction permit or any applicable rule contained in Chapter 8 is prohibited, except as provided in ARM 17.8.745(2);

   b. Any construction or changed conditions of operation that would qualify as a major modification under Subchapters 8, 9 or 10 of Chapter 8;

   c. Any construction or changed condition of operation that would affect the plume rise or dispersion characteristic of emissions that would cause or contribute to a violation of an ambient air quality standard or ambient air increment as defined in ARM 17.8.804;

   d. Any construction or improvement project with a potential to emit more than 15 tons per year may not be artificially split into smaller projects to avoid air quality preconstruction permitting; or

   e. Emission reductions obtained through offsetting within a facility are not included when determining the potential emission increase from construction or changed conditions of operation, unless such reductions are made federally enforceable.

4. Any facility making a de minimis change pursuant to ARM 17.8.745(1) shall notify the Department if the change would include a change in control equipment, stack height, stack diameter, stack gas temperature, source location or fuel specifications, or would result in an increase in source capacity above its permitted operation or the addition of a new emission unit. The notice must be submitted, in writing, 10 days prior to start up or use of the proposed de minimis change, or as soon as reasonably practicable in the event of an unanticipated circumstance causing the de minimis change, and must include the information requested in ARM 17.8.745(1) (STATE ENFORCEABLE ONLY until approval by the EPA as part of the SIP).

Z. National Emission Standard for Asbestos
40 CFR, Part 61, Subpart M

The permittee shall not conduct any asbestos abatement activities except in accordance with 40 CFR 61, Subpart M (National Emission Standard for Hazardous Air Pollutants for Asbestos).

AA. Asbestos
ARM 17.74, Subchapter 3, General Provisions and Subchapter 4, Fees

The permittee shall comply with ARM 17.74.301, *et seq*., and ARM 17.74.401, *et seq*. (State only)

BB. Stratospheric Ozone Protection – Servicing of Motor Vehicle Air Conditioners
40 CFR, Part 82, Subpart B

If the permittee performs a service on motor vehicles and this service involves ozone-depleting substance/refrigerant in the motor vehicle air conditioner (MVAC), the permittee is subject to all the applicable requirements as specified in 40 CFR 82, Subpart B.

CC. Stratospheric Ozone Protection – Recycling and Emission Reductions

40 CFR, Part 82, Subpart F

The permittee shall comply with the standards for recycling and emission reductions in 40 CFR 82, Subpart F, except as provided for MVACs in Subpart B:

1. Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to §82.156;

2. Equipment used during the maintenance, service, repair or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to §82.158;

3. Persons performing maintenance, service, repair or disposal of appliances must be certified by an approved technical certification program pursuant to §82.161;

4. Persons disposing of small appliances, MVACs and MVAC-like (as defined at §82.152) appliances must comply with recordkeeping requirements pursuant to §82.166;

5. Persons owning commercial or industrial process refrigeration equipment must comply with the leak repair requirements pursuant to §82.156; and

6. Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to §82.166.

DD. Emergency Episode Plan

The permittee shall comply with the requirements contained in Chapter 9.7 of the State of Montana Air Quality Control Implementation Plan.

Each major source emitting 100 tons per year located in a Priority I Air Quality Control Region, shall submit to the Department a legally enforceable Emergency Episode Action Plan (EEAP) that details how the source will curtail emissions during an air pollutant emergency episode. The industrial EEAP shall be in accordance with the Department's EEAP and shall be submitted according to a timetable developed by the Department, following Priority I reclassification.

EE. Definitions

Terms not otherwise defined in this permit or in the Definitions and Abbreviations Appendix of this permit, shall have the meaning assigned to them in the referenced regulations.

APPENDICES

Appendix A INSIGNIFICANT EMISSION UNITS

Disclaimer: The information in this appendix is not State or Federally enforceable, but is presented to assist MSCC, the permitting authority, inspectors, and the public.

Pursuant to ARM 17.8.1201(22)(a), an insignificant emission unit means any activity or emissions unit located within a source that: (i) has a potential to emit less than five tons per year of any regulated pollutant; (ii) has a potential to emit less than 500 pounds per year of lead; (iii) has a potential to emit less than 500 pounds per year of hazardous air pollutants listed pursuant to Sec. 7412 (b) of the FCAA; and (iv) is not regulated by an applicable requirement, other than a generally applicable requirement that applies to all emission units subject to Subchapter 12.

List of Insignificant Activities:

The following table of insignificant sources and/or activities were provided by MSCC. Because there are no requirements to update such a list, the emission units and/or activities may change from those specified in the table.

EU ID	Description
IEU1	Amine Unit
IEU2	NaSH Plant, Atmospheric NaSH Plant Storage, Atmospheric NaSH and Caustic Loading/Unloading
IEU3	Inert Gas Units (2)
IEU4	Hydrogen Permeation Unit
IEU5	Old Hydrogenation Unit
IEU6	Cryogenic Storage
IEU7	Solid Sulfur Storage, Handling and Loadout
IEU8	Scrap Handling and Remelt
IEU9	Emergency/Back-up Generator
IEU10	Auxiliary Diesel Generators
IEU11	Repair and Maintenance Activities
IEU12	Space Heaters < 500 MBtu/hr
IEU13	Welding/Grinding/Cutting Operations
IEU14	Operation, Loading, and Unloading of VOC Storage Tanks
IEU15	Sewer Manholes, Junction Boxes, Sumps and Lifts Associated with Wastewater Treatment
IEU16	Fugitive Emissions: Diesel Fuel & Gasoline Fuel Combustion
IEU17	Feedwater Treatment Unit/Pumphouse

Appendix B DEFINITIONS and ABBREVIATIONS

"Act" means the Clean Air Act, as amended, 42 U.S. 7401, *et seq*.

"Administrative permit amendment" means an air quality operating permit revision that:

(a) Corrects typographical errors;

(b) Identifies a change in the name, address or phone number of any person identified in the air quality operating permit, or identifies a similar minor administrative change at the source;

(c) Requires more frequent monitoring or reporting by MSCC;

(d) Requires changes in monitoring or reporting requirements that the Department deems to be no less stringent than current monitoring or reporting requirements;

(e) Allows for a change in ownership or operational control of a source if the Department has determined that no other change in the air quality operating permit is necessary, consistent with ARM 17.8.1225; or

(f) Incorporates any other type of change that the Department has determined to be similar to those revisions set forth in (a)-(e), above.

"Applicable requirement" means all of the following as they apply to emissions units in a source requiring an air quality operating permit (including requirements that have been promulgated or approved by the Department or the administrator through rule making at the time of issuance of the air quality operating permit, but have future-effective compliance dates, provided that such requirements apply to sources covered under the operating permit):

(a) Any standard, rule, or other requirement, including any requirement contained in a consent decree or judicial or administrative order entered into or issued by the Department, that is contained in the Montana state implementation plan approved or promulgated by the administrator through rule making under Title I of the FCAA;

(b) Any federally enforceable term, condition or other requirement of any air quality preconstruction permit issued by the Department under Subchapters 7, 8, 9 and 10 of this chapter, or pursuant to regulations approved or promulgated through rule making under Title I of the FCAA, including parts C and D;

(c) Any standard or other requirement under Sec. 7411 of the FCAA, including Sec. 7411(d);

(d) Any standard or other requirement under Sec. 7412 of the FCAA, including any requirement concerning accident prevention under Sec. 7412(r)(7), but excluding the contents of any risk management plan required under Sec. 7412(r);

(e) Any standard or other requirement of the acid rain program under Title IV of the FCAA or regulations promulgated thereunder;

(f) Any requirements established pursuant to Sec. 7661c(b) or Sec. 7414(a)(3) of the FCAA;

(g) Any standard or other requirement governing solid waste incineration, under Sec. 7429 of the FCAA;

(h) Any standard or other requirement for consumer and commercial products, under Sec. 7511b(e) of the FCAA;

(i) Any standard or other requirement for tank vessels, under Sec. 7511b(f) of the FCAA;

(j) Any standard or other requirement of the regulations promulgated to protect stratospheric ozone under Title VI of the FCAA, unless the administrator determines that such requirements need not be contained in an air quality operating permit;

(k) Any national ambient air quality standard or increment or visibility requirement under part C of Title I of the FCAA, but only as it would apply to temporary sources permitted pursuant to Sec. 7661c(e) of the FCAA; or

(l) Any federally enforceable term or condition of any air quality open burning permit issued by the Department under Subchapter 6.

"Department" means the Montana Department of Environmental Quality.

"Emissions unit" means any part or activity of a stationary source that emits or has the potential to emit any regulated air pollutant or any pollutant listed under Sec. 7412(b) of the FCAA. This term is not meant to alter or affect the definition of the term "unit" for purposes of Title IV of the FCAA.

"Excess Emissions" means any visible emissions from a stack or source, viewed during the visual surveys, that meets or exceeds 15% opacity (or 30% opacity if associated with a 40% opacity limit) during normal operating conditions.

"FCAA" means the Federal Clean Air Act, as amended.

"Federally enforceable" means all limitations and conditions which are enforceable by the administrator, including those requirements developed pursuant to 40 CFR Parts 60 and 61, requirements within the Montana state implementation plan, and any permit requirement established pursuant to 40 CFR 52.21 or under regulations approved pursuant to 40 CFR Part 51, Subpart I, including operating permits issued under an EPA approved program that is incorporated into the Montana state implementation plan and expressly requires adherence to any permit issued under such program.

"Fugitive emissions" means those emissions that could not reasonably pass through a stack, chimney, vent, or other functionally equivalent opening.

"General air quality operating permit" or **"general permit"** means an air quality operating permit that meets the requirements of ARM 17.8.1222, covers multiple sources in a source category, and is issued in lieu of individual permits being issued to each source.

"Hazardous air pollutant" means any air pollutant listed as a hazardous air pollutant pursuant to Section 112(b) of the FCAA.

"Non-federally enforceable requirement" means the following as they apply to emission units in a source requiring an air quality operating permit:

(a) Any standard, rule, or other requirement, including any requirement contained in a consent decree, or judicial or administrative order entered into or issued by the Department, that is not contained in the Montana state implementation plan approved or promulgated by the administrator through rule making under Title I of the FCAA;
(b) Any term, condition or other requirement contained in any air quality preconstruction

permit issued by the Department under Subchapters 7, 8, 9 and 10 of this chapter that is not federally enforceable;

(c) Does not include any Montana ambient air quality standard contained in Subchapter 2 of this chapter.

"Permittee" means the owner or operator of any source subject to the permitting requirements of this subchapter, as provided in ARM 17.8.1204, that holds a valid air quality operating permit or has submitted a timely and complete permit application for issuance, renewal, amendment, or modification pursuant to this subchapter.

"Regulated air pollutant" means the following:

(a) Nitrogen oxides or any volatile organic compounds;

(b) Any pollutant for which a national ambient air quality standard has been promulgated;

(c) Any pollutant that is subject to any standard promulgated under Sec. 7411 of the FCAA;

(d) Any Class I or II substance subject to a standard promulgated under or established by Title VI of the FCAA; or

(e) Any pollutant subject to a standard or other requirement established or promulgated under Sec. 7412 of the FCAA, including but not limited to the following:

(i) Any pollutant subject to requirements under Sec. 7412(j) of the FCAA. If the administrator fails to promulgate a standard by the date established in Section 7412(e) of the FCAA, any pollutant for which a subject source would be major shall be considered to be regulated on the date 18 months after the applicable date established in Sec. 7412(e) of the FCAA;

(ii) Any pollutant for which the requirements of Sec. 7412(g)(2) of the FCAA have been met but only with respect to the individual source subject to Sec. 7412(g)(2) requirement.

"Responsible official" means one of the following:

(a) For a corporation: a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit and either:

(i) The facilities employ more than 250 persons or have gross annual sales or expenditures exceeding $25 million (in second quarter 1980 dollars); or

(ii) The delegation of authority to such representative is approved in advance by the Department.

(b) For a partnership or sole proprietorship: a general partner or the proprietor, respectively.

(c) For a municipality, state, federal, or other public agency: either a principal executive officer or ranking elected official. For the purposes of this part, a principal executive

officer of a federal agency includes the chief executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., a regional administrator of the environmental protection agency).

(d) For affected sources: the designated representative in so far as actions, standards, requirements, or prohibitions under Title IV of the FCAA or the regulations promulgated thereunder are concerned, and the designated representative for any other purposes under this subchapter.

Abbreviations:

ARM	Administrative Rules of Montana
ASTM	American Society of Testing Materials
BACT	Best Available Control Technology
BDT	bone dry tons
Btu	British thermal unit
CFR	Code of Federal Regulations
CO	carbon monoxide
DEQ	Department of Environmental Quality
dscf	dry standard cubic foot
dscfm	dry standard cubic foot per minute
EEAP	Emergency Episode Action Plan
EPA	U.S. Environmental Protection Agency
EPA Method	Test methods contained in 40 CFR 60, Appendix A
EU	emissions unit
FCAA	Federal Clean Air Act
gr	grains
HAP	hazardous air pollutant
IEU	insignificant emissions unit
Mbdft	thousand board feet
Method 5	40 CFR 60, Appendix A, Method 5
Method 9	40 CFR 60, Appendix A, Method 9
MMbdft	million board feet
MMBtu	million British thermal units
NO_X	oxides of nitrogen
NO_2	nitrogen dioxide
O_2	oxygen
Pb	lead
PM	particulate matter
PM_{10}	particulate matter less than 10 microns in size
psi	pounds per square inch
scf	standard cubic feet
SIC	Source Industrial Classification
SO_2	sulfur dioxide
SO_X	oxides of sulfur
tpy	tons per year
U.S.C.	United States Code
VE	visible emissions
VOC	volatile organic compound

Appendix C NOTIFICATION ADDRESSES

Compliance Notifications:

Montana Department of Environmental Quality
Permitting and Compliance Division
Air Resources Management Bureau
P.O. Box 200901
Helena, MT 59620-0901

United States EPA
Air Program Coordinator
Region VIII, Montana Office
10 W. 15th Street, Suite 3200
Helena, MT 59626

Permit Modifications:

Montana Department of Environmental Quality
Permitting and Compliance Division
Air Resources Management Bureau
P.O. Box 200901
Helena, MT 59620-0901

Office of Partnerships and Regulatory Assistance
Air and Radiation Program
US EPA Region VIII 8P-AR
999 18th Street, Suite 300
Denver, CO 80202-2466

Appendix D AIR QUALITY INSPECTOR INFORMATION

Disclaimer: The information in this appendix is not State or Federally enforceable but is presented to assist MSCC, permitting authority, inspectors, and the public.

1. Directions to Plant:

The Montana Sulphur & Chemical Company (MSCC) Lockwood facility is located in Yellowstone County, Montana at 627 Exxon Road. MSCC's plant site is approximately three miles northeast of the city of Billings, at the northeastern end of the Burlington Northern Railroad East Billings industrial switchyard.

2. Safety Equipment Required:

The following is a list of general safety rules for MSCC related to the requirements of ARM 17.8.1206(9).

a. Check in with office and area supervisor prior to entering plant property. Bring and show identification.
b. Visitor must have ability to understand oral and written instructions and generally have mobility sufficient to rapidly escape areas in an emergency.
c. Smoking is prohibited except in designated areas.
d. Required safety equipment includes:
   - Hard hat
   - Hard shoes, non-slip soles
   - Safety glasses
   - Long sleeve shirt
   - Full-length pants
   - Gloves
e. Loose or torn clothing, long hair, rings or pendant jewelry may not be worn around moving machinery.
f. Visitor must stay with and follow instructions of assigned plant guide at all times while on premises.
g. Climbing through machinery and equipment as a short-cut is prohibited.
h. Observe any posted safety signs or messages.
i. Do not interfere with operation or work of employees or contractors.
j. Do not open, adjust or tamper with any equipment.
k. No photographic or electronic equipment may be operated unless approved by the tour guide.
l. Advise the main office and area supervisor of all arrivals and departures.
m. Advise MSCC of any observed problems threatening safety of self or workers or of injuries sustained at once. It is also the responsibility of each visitor and/or their employer to advise MSCC in advance of any special health conditions of the individual guest.
n. Attend participate in, and satisfactorily complete all safety training as may be required by tour guide.
o. Appropriate eye and ear protection shall be worn as required.
p. Visitors enter facility at own risk' visitors use, occupy, and wear any company, contractor or employee provided equipment at visitor's own risk. A visitor assumes risk of loss to visitor property, valuables, or vehicles.
q. MSDS information on chemicals at the site is available at the work site, and the observance of information and precautions thereof is the responsibility of the visitor.

3. Facility Plot Plan:

A plot plan was submitted on February 4, 2005, in the source's Title V Operating Permit Renewal Application.

Appendix E H_2S IN FUEL GAS MONITORING PLAN

A. Initial Submittal

Montana Sulphur & Chemical Company (MSCC) shall submit to the Department, no later than 60 days from the date the operating permit is deemed effective, an *H_2S in Fuel Gas Monitoring Plan (Plan*)**.** The Plan shall cover all emission units specified in Section C.1 below in accordance with the operating permit.

MSCC shall implement the requirements of Section C of this Appendix no later than 60 days from the date the operating permit is deemed effective.

B. Provisions For Changing the Plan

The requirements of Appendix E, H_2S In Fuel Gas Monitoring Plan may be changed if both MSCC and the Department mutually agree in writing to any changes. Changes to Appendix E or the Plan cannot be implemented until both MSCC and the Department agree in writing.

C. Minimum Requirements for *the H_2S in Fuel Gas Monitoring Plan*

Whenever fuel gas other than natural gas or commercial grade LP is combusted at MSCC in one or more of the combustion units specified in Section C.I of this Appendix and the combustion products of that gas are vented (other than by fugitive emissions) to any stack other than the 100-Meter Stack, or at a flare, MSCC must perform H_2S in fuel gas monitoring for those affected units. The test must be performed using a Draeger Tube (Gas Tec Tube or any equivalent monitoring device as approved by the Department) within an appropriate measuring range not to exceed 1,200 parts per million (ppm) H_2S. For example, if MSCC expects an H_2S fuel gas concentration of 30 ppm and uses a 30 ppm detection tube and the measured concentration is 30 ppm or less, then the detection device will be considered appropriate for this requirement. However, if the measured concentration in this example exceeds the 30 ppm detection value, then MSCC shall re-sample the stream with a higher concentration detection device (not required to exceed 1,200 ppm) such that the actual detection value of the tube is not exceeded. The test sampling may either be performed at the fuel gas header for all units firing the same fuel header gas or at MSCC's option, tests may be performed on individual emission units for those affected emission units firing fuels other than natural gas or commercial grade LP gas. If the test is conducted at the fuel gas header only one test is necessary for the representative period (i.e. 3 hr). However, if the test is conducted at specific emissions units, and no fuel header test is performed, then a test must be performed covering the fuel gas for each emission unit being so operated during the representative period on each fuel gas other than ***natural gas or commercial grade LP***.

The Draeger Tube (or its equivalent) analysis must be performed at least once per calendar week at the fuel gas header or at the Monaca plant heaters (assuming the Monaca plant was operational during the week) for the 30 ppm annual fuel gas standard as provided below. If four consecutive Draeger Tube (or its equivalent) analyses taken at least 84 hours apart are less than 25 ppm then MSCC may sample monthly thereafter. However, if any sample is above 25 ppm then MSCC must resume the weekly analyses until four Draeger Tube (or its equivalent) analyses are less than 25 ppm.

For the remaining affected units subject to the 12 lb/3-hr SO_2 emission limit. The Draeger Tube (or its equivalent) analyses must be performed at least every three hours for the first 24 hour ***period when any fuel gas other than natural gas or commercial grade LP gas is fired in the affected units and vented to either the 30-Meter or auxiliary stacks***. If all eight samples taken in the previous 24 hours are less than 90% of the emission limit (10.8 lb/3-hr), then MSCC may sample at 12-hour intervals for seven days, otherwise, MSCC shall continue sampling every 3-

hours until that condition is met. If the 12-hour samples are less than 90% of the emission limit (10.8 lb/3-hr), then MSCC may sample once per calendar day (each Draeger Tube (or its equivalent) analysis must be performed at least twelve hours from the previous one). If 14 of the daily analyses are less than 90% of the emission limit (10.8 lb/3-hr), then MSCC may perform weekly analyses (each weekly analyses must have at least 84 hours between analyses). If any analysis is in excess of 10.8 lb/3-hr then the 3-hour schedule must resume by the following calendar day and continue until eight samples taken in a 24-hour period are again less than 90% of the emission limit. Then MSCC may resume sampling once per day, as above. Once 14 daily samples, as above are less than 90% of the emission limit, then MSCC may resume weekly sampling.

The above not withstanding, MSCC may begin burning fuel gases other than natural or LP gas at anytime, without necessity for immediately instituting 3-hour sampling if it has Draeger Tube or equivalent test data (as approved by the Department) on the stream of refinery fuel gas introduced into the header that show that the gas has been meeting the above specification and sampling frequency at the time of introduction of that gas into the fuel header. For example, if MSCC has test data on the stream of fuel gas being returned to Exxon that follows the above sampling schedule (8 three hour samples, followed by 14 daily samples, all of which would have resulted in less than 90% of the limit if it had been used in the affected units), MSCC may burn that gas using a weekly sampling schedule. Similarly, if MSCC has data on the stream that is part of the way through the above declining schedule (i.e. has passed 5 of 14 days on the daily schedule), MSCC may begin to use that gas following the daily schedule until the 14 days are complete and then begin the required testing on the weekly schedule (assuming all samples are less than 10.8 lb/3-hr). In making use of this proviso, MSCC may reasonably pro-rate the effect of burning a blend of this newly introduced stream and natural gas, for example, by using the ratio of refinery fuel gas flow with the sum of the flow of refinery gas and natural gas. Such flow rates may be determined using available custody transfer measurements, process meters, and engineering calculations. Further, the above notwithstanding, MSCC may elect for any period in which it has Draeger Tube or equivalent data on the refinery fuel gas stream indicating a concentration of less than 30 ppm H_2S to use that data as representative of fuel burnt anywhere in the facility, without the necessity of considering blend ratios or the necessity of further measuring, estimating or calculating fuel consumption or resultant emissions quantities or averages if it chooses to substitute and present this data based on the assumption that each operating unit consumed fuel gas of that quality, firing at stated capacity for the period in question, and upon such presentation shall be deemed in compliance for each affected unit. At a minimum, the Plan shall include the information outlined below unless otherwise approved in writing by the Department.

I. Identify Testing Locations for all Affected Emission Units:

EU1 Monaca Plant - Sulfur Vaporizer Heater
EU2 Monaca Plant - Steam Methane Superheater
EU5 Railroad Boiler
EU6 Fuel Gas Boiler H-1
EU7 Fuel Gas Boiler H1-A
EU8 Fuel Gas Boiler H1-1
EU9 Fuel Gas Boiler H1-2
EU10 17-MMBtu/hr Boiler

II. Identify the information to be recorded for each emissions unit firing fuels other than natural gas or commercial grade LP:

Date and Time of Draeger Tube (or its equivalent) analysis
Location of Draeger Tube (or its equivalent) analysis

Initials of Person Taking Analysis
Draeger Tube (or its equivalent) Reading (ppm)
Identify Type(s) of gas being fired
Flow rate of Gas (SCFD) to all emissions units
Calculated result in lb/3-hr
Proposed method(s) of qualifying a substitute technique

III. Identify the methods for calculating the 12 lb/3- hr limit from the concentration obtained from the Draeger Tube (or its equivalent) analysis. The method must identify how the calculation will be made and what assumptions MSCC has made in performing the calculations.

IV. Identify the frequency of testing for all emission units. The frequency must be at least as stringent as outlined above. However, nothing in this Plan shall preclude or be construed to preclude MSCC from testing more frequently or differently than the above schedule, from time to time, as it sees fit.

Appendix F SO_2 STIPULATION

Although the hard copy of Appendix E has been removed from the permit, the contents of Appendix F, June 12, 1998, and March 17, 2000, Board Orders Adopting and SO_2 Control Plan remain as applicable requirements as stated in the Title V Operating Permit #OP2611-03. To receive a hard copy of this appendix, please contact one of the following:

Montana Department of Environmental Quality
Permitting and Compliance Division
Air Resources Management Bureau
1520 E. Sixth Ave.
P.O. Box 200901
Helena, Montana 59620-0901
Bureau Phone #: (406) 444-3490

OR

Montana Sulphur & Chemical Company
P.O. Box 31118
Billings, Montana 59107
Phone #: (406) 252-9324